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A Catalogue

OF THE PRINCIPAL [illegible] STARS

VITTORIO EM. III
ea

FONDO PIZZOFALCONE

BIBLIOTECA NAZIONALE VITTORIO EM. III NAPOLI
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CATALOGUE

OF

606 PRINCIPAL FIXED STARS

IN THE

SOUTHERN HEMISPHERE.

BIBLIOTECA PROVINCIALE di NAPOLI

LONDON:
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A

CATALOGUE

OF

606 PRINCIPAL FIXED STARS

IN THE

SOUTHERN HEMISPHERE:

DEDUCED FROM OBSERVATIONS MADE AT

THE OBSERVATORY, ST. HELENA,

FROM NOVEMBER 1829 TO APRIL 1833.

BY

MANUEL J. JOHNSON,

LIEUTENANT ST. HELENA ARTILLERY.

BIBLIOTECA PROVINCIALE di NAPOLI

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AT THE EXPENSE OF THE HONOURABLE EAST INDIA COMPANY.

LONDON.—M.DCCC.XXXV.

NAPOLI

INTRODUCTION.

THE St. Helena Observatory was founded by the Honourable East India Company at the recommendation of the late General ALEXANDER WALKER, during his government of the island.

In 1825, the building being in contemplation, I was ordered to proceed to the Cape of Good Hope to take the advice of His Majesty's Astronomer there on the subject.

An undertaking which had in view the interests of astronomy was not likely to meet with neglect from Mr. FALLOWS. He immediately supplied a plan for a small Observatory, recommended suitable instruments, and from that period to the time of his death continued to extend to the establishment the powerful aid of his talents and judgment.

The building contains separate rooms for the two meridian instruments, another intended for a zenith tube, besides small apartments for the observer. It is situated 700 feet above the level of the sea, on the summit of the range of hills which forms the western boundary of James Town, about a quarter of a mile south of the battery on Ladder Hill.

The work was nearly finished before the departure of General WALKER in 1828, in whom we lost a warm and efficient patron. But before proceeding to place the instruments, I was desirous to avail myself of an invitation from Mr. FALLOWS to witness a similar operation then carrying on at the Cape, and the local Government liberally acceded to my wishes.

I returned from this second excursion in March 1829, and by the end of that year the piers were completed. About this time the observations with the Circle commenced, of which the results are now offered. No use was made of the transit before August 1830.

These instruments are the work of the Messrs. GILBERT, of Leadenhall Street. Before entering into a description of them, I may state, that by far the greater portion of observations was made by the assistant, Mr. George Armstrong, and a non-commissioned officer of Artillery, Serjeant Ramage, also attached to the establishment. Upon Mr. Armstrong, indeed, devolved almost the entire management of the Circle; and I am happy to have an opportunity of acknowledging the zeal and assiduity with which, under circumstances far from encouraging, he discharged the often laborious duties of his office.

The Transit Instrument.

The diameter of the object-glass is 3·8 inches, of which, however, only 3·1 inches were used; the image being more perfect with this aperture. Its focal length is 62 inches.

The power of the eye-piece always used (the highest with which the instrument is provided) was 59.

The horizontal axis is 34½ inches between the collars of the pivots, which are of bell metal, 1·3 inch in length and 1·0 inch in diameter. To relieve them from the whole pressure of the instrument, friction rollers were supplied, similar to those sometimes attached to altitude and azimuth circles: these I found inconvenient, and did not use.

The Y's are of brass attached to strong plates of the same metal, which move in dovetail grooves. The adjusting-screws are steel, 6½ inches in length from the head to the end of the thread.

To obviate the instability which might arise from unequal expansion, the maker wished to substitute screws of brass: but as the extreme range of the in-door thermometer does not exceed 10° or 12° throughout the year, I thought this alteration unnecessary.

The pillars which support the instrument are composed of stone found in the neighbourhood. It is procured in large blocks, and may be cut with nicety to any shape. But the surface is not susceptible of smoothness or polish: to prevent dust from collecting, it is thinly coated with cement; the sockets for receiving the screws are firmly bedded their whole length in the stone.

The Observatory is situated at some distance from a public thoroughfare, and the foundation on which the pillars (and indeed the building altogether) stand is solid rock.

The systems of wires which have been used in the course of observation each contained five vertical wires and one horizontal. The equatorial distances of the side wires from the central one were deduced from the time of passage of stars of different degrees of declination. In none of the systems were the intervals equal: the reduction to the centre was, therefore, accomplished by adding to the mean of the five wires a correction

$$= \pm n \times \text{sec. declination}.$$

n being a number derived from the formula

$$\frac{(a + b) - (c + d)}{5}$$

where a, b, c, d, respectively denote the distances of the side wires from the centre wire. When the passage over any of the wires was missed, the times of transit over the remainder were separately reduced to the centre by a table of intervals calculated for every degree of declination, from the equator to 73°.

The instrument was usually kept in adjustment by the mechanical means with which it is provided.

The axis was frequently examined with a riding level, and the inclination never permitted to exceed $1''\cdot0$ or $1''\cdot5$. The value of the divisions of the level-scale was examined, by attaching the level to the telescope of the mural circle, and observing the number of divisions the bubble passed over, when the telescope was raised or depressed a given number of seconds; and each small division was found equal to $0''\cdot90$; this value remaining nearly constant in whatever part of the tube the bubble was situated.

The line of collimation was adjusted by a terrestrial mark, and afterwards verified by reversing the axis during the passage of a circumpolar star. The transit over the two or three first wires being observed *before*, the remainder *after*, reversion. The whole were then separately reduced to the centre, and the difference between the mean of the results obtained in each position was considered equal to twice the error of collimation at the star's place.

The instrument being thus corrected for level and collimation, the centre wire was brought to bisect a meridian mark, the position of which had been determined by the method of " high and low stars." To counteract any fixed instrumental error that might exist, the axis was occasionally reversed.

The results obtained in this way were sufficiently accordant until the month of April 1832. I then perceived that the right ascension of a southern star, obtained with the illuminated end of the axis *east*, was always greater than when the instrument was in the opposite position. But no such difference was perceptible in a star north of the zenith.

The disagreement, I conceived at first, proceeded from defective collimation. This explanation, however, was soon found to be inadequate.

To discover the cause of error, I adopted a method practised by Professor STRUVE with DOLLOND'S transit at Dorpat, which he has described in the *Dorpat Observations*, vol. iii. p. xxvi.

Two sets of stars were selected of different degrees of declination, so that every star in the one set had its fellow, of nearly corresponding declination, in the other. After observing the first group, the axis was reversed, and the other group observed on the same night.

The instrument was left in this position until the next favourable opportunity, when the process was repeated. Both groups were thus observed in different positions of the axis.

If there were no instrumental error, and the reversions carefully made, the difference of right ascension between any two stars in the same parallel would be the same whichsoever way observed.[*] Otherwise the observed difference will be erroneous in the one case to the amount $\pm \frac{2\,k}{\cos.\,\delta}$; in the other $\mp \frac{2\,k}{\cos.\,\delta}$; subtracting, therefore, one night's result from the other, we obtain a quantity equal to $\pm \frac{4\,k}{\cos.\,\delta}$.

In this way the difference of right ascension between γ^2 *Argûs* and δ^2 *Centauri* was found to be:

1833, April 23. γ^2 Argûs (lamp west) $-$ δ^2 Cent. (lamp east) $= -3^h\ 55^m\ 20^s{\cdot}66$
24. γ^2 Argûs (lamp east) $-$ δ^2 Cent. (lamp west) $= -3\ \ 55\ \ 21{\cdot}20$

Hence $$k = \frac{0^s{\cdot}54\ .\ \cos.\,\delta}{4} = \frac{0^s{\cdot}54 \times 0{\cdot}665}{4} = 0^s{\cdot}090$$

Now, supposing k to be the combined effect of an error in collimation, and a lateral flexure in the instrument, varying as the cosine of the zenith distance, we will substitute for it

$$c + a\ .\ \cos.\ z$$

(z being the zenith distance, + on the north side, − on the south; and let

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[*] Of course, after correcting for the change of apparent places and the rate of the clock.

c and a be considered *positive* if towards the east, *negative* if towards the west), and, transposing it to the other side of the equation, we have

$$0 = 0^{s}{\cdot}090 - c - 0{\cdot}84\,a^{*}$$

In this manner the following equations were obtained :—

η Chamæl. — β Chamæl.	$z = -62^{\circ}\ 26'$	$0 = -{\cdot}047 - c - 0{\cdot}46\,a$
β Argûs — α Muscæ	$= -52\ 41$	$0 = -{\cdot}036 - c - 0{\cdot}61\,a$
ι Argûs — λ Centauri	$= -44\ 37$	$0 = -{\cdot}002 - c - 0{\cdot}71\,a$
ϑ Argûs — ε Centauri	$= -39\ 15$	$0 = -{\cdot}026 - c - 0{\cdot}77\,a$
γ^{2} Argûs — ϑ^{2} Centauri	$= -32\ 24$	$0 = +{\cdot}090 - c - 0{\cdot}84\,a$
λ Argûs — κ Centauri	$= -24\ 30$	$0 = +{\cdot}084 - c - 0{\cdot}91\,a$
μ Hydræ — γ Hydræ	$= -\ 0\ 26$	$0 = +{\cdot}072 - c - 1{\cdot}00\,a$
κ Hydræ — ϑ Hydræ	$= +\ 2\ 13$	$0 = +{\cdot}128 - c - 1{\cdot}00\,a$
α Hydræ — 28 Virginis	$= +\ 7\ 59$	$0 = +{\cdot}023 - c - 0{\cdot}99\,a$
ϑ Hydræ — 35 Virginis	$= +21\ 19$	$0 = +{\cdot}068 - c - 0{\cdot}93\,a$
Regulus — ι Virginis	$= +27\ 25$	$0 = +{\cdot}039 - c - 0{\cdot}89\,a$
m Lyncis — ψ Urs. Maj.	$= +60\ 37$	$0 = -{\cdot}013 - c - 0{\cdot}49\,a$
37 Urs. Maj. — γ Urs. Maj.	$= +72\ 12$	$0 = -{\cdot}018 - c - 0{\cdot}31\,a$
α Urs. Maj. — κ Urs. Maj.	$= +77\ 10$	$0 = -{\cdot}036 - c - 0{\cdot}22\,a$

Which, treated by the method of *least squares*, give for final equations

$$0 = -324 + 14{\cdot}00\,c + 10{\cdot}13\,a$$
$$0 = -387 + 10{\cdot}13\,c + 8{\cdot}22\,a$$

Whence we obtain

$$a = +0^{s}{\cdot}171$$
$$c = -0\,{\cdot}100$$

Hence, then, it appears, that, at the zenith, the circle described by the optical axis of the telescope deviated $2''{\cdot}565$ east (when the lamp was on the *east pier*) from the vertical circle; while, at the horizon, they intersected each other.

An irregularity of this kind may be produced by inequality in the size of the pivots; weakness in the axis, causing it to yield unequally in different positions of the telescope; or a lateral flexure in the telescope itself.

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[*] I have omitted the term "b" used by Professor STRUVE, depending on the *sine* of the zenith distance; for it is obvious, since the centre wire was made to bisect the meridian mark (which is elevated only about 7° above the horizon) in both positions of the axis, that such an effect of flexure must have been nearly, if not altogether, annihilated.

To which of the two latter causes it is in this case to be ascribed, we have not the means to determine. But I find recorded some observations of the level *before* and *after* reversion of the axis, which seem to exempt the pivots from the blame.

1831.	April 12	Lamp East	l = +1″·00	Diam. of the perforated pivot *greatest*.........	″ +0·60
		— West	= +1·60		
	May 19	— West	= +1·30	....	+0·40
		— East	= +0·90		
	Sept. 9	— West	= +0·38	....	−0·38
		— East	= +0·76		
1832.	May 25	— West	= −0·18	....	+0·02
		— East	= −0·20		
	July 26	— East	= 0·00	....	+1·08
		— West	= +1·08		
1833.	Feb. 16	— West	= +0·83	....	+0·37
		— East	= +0·46		
				Mean ...... =	+0·35

Not amounting to $\frac{1}{7}$th the error we have found to exist, and in a *contrary* direction.

But this is a question rather of curiosity than importance; for, whatever be the cause, the remedy is the same.

The values assigned to *a* and *c* are, probably, neither of them quite exact. But, supposing *a* to be so (for we have no means of detecting its error independently), the *relative* value of *c* may be more accurately determined from observations of circumpolar stars, in the course of which the instrument was reversed.

				°	'	$a = 0^{s}\cdot000$	$a = +0^{s}\cdot171$
1832.	July 18	∗	Oct. Alt. =	19	54	$c = -0\cdot050$	$c = -0\cdot108$
			……	18	20	+0·004	−0·050
	19		……	18	20	−0·033	−0·087
	27		……	19	54	−0·023	−0·081
			……	18	20	+0·031	−0·023
	30		……	19	54	+0·023	−0·035
			……	18	20	+0·020	−0·034
	Oct. 13		……	19	4	−0·012	−0·068
		τ	……		. .	−0·005	−0·056
	27	∗	……	19	4	+0·012	−0·044
	Nov. 26	z	S.P.			+0·046	−0·008
		∗	S.P.	13	36	+0·006	−0·050
1833.	Feb. 22	∗	S.P.	12	43	−0·050	−0·106
			Mean ……			$c = -0\cdot002$	$c = -0\cdot058$

The third column of the above table contains the values of c when a is supposed $=0$. The fourth column shews what those values become when a is assumed $= +0^{s}\cdot171$.

We shall, therefore, consider

$$a = \pm 0^{s}\cdot171$$
$$c = \mp 0\cdot058$$

The *upper* signs to be used when the lamp is east; the *lower* when west.

Under these circumstances the corrections to be applied to an observed transit are

$$\text{Corr.} = \frac{\{\alpha\,.\,\sin.\,(l-\delta)\} + \{\beta\,.\,\cos.\,(l-\delta)\} + \{c + a\,.\,\cos.\,z\}}{\cos.\,\delta}$$

Where α, β, respectively denote the errors in azimuth and level; l, δ, the latitude of the place, and the star's declination.

But the observations having been chiefly reduced before the error of collimation and flexure were known, I will endeavour to shew how the requisite corrections on these accounts were obtained without the labour of recomputation.

The mean declination of the stars in the Greenwich Catalogue employed in finding the clock error is $+20°$; but the lower stars not having been used so frequently as those nearer the equator, we may assume $+10^\circ$ as the mean declination.

Here
$$\frac{c + a \,.\, \cos.\, z}{\cos.\, \delta} = f = \pm\, 0^{s}\!\cdot\!097$$

This quantity may be considered as part of a constant error in the determination of Time, *additive* to the clock error when the lamp is east; *subtractive* when west.

At any other declination, say -40°

$$\frac{c + a \,.\, \cos.\, z'}{\cos.\, \delta'} = f' = \pm 0^{s}\!\cdot\!128$$

The place of the latter, therefore, determined without reference to the error of collimation and flexure, was corrected by

$$(f' - f) = \pm 0\cdot031$$

By this process the observations were reduced to a great circle. It remains to ascertain the deviation of this great circle from the meridian: which, as the centre wire was made to bisect the same mark (on the south side of the Observatory) in both positions of the axis, may best be done by observations of circumpolar stars.

In the following table I have collected all the available observations* of this kind; and from them the meridian error has been deduced—by comparing, in those cases where a star has been observed at *one* culmination only, the time recorded in the column " Reduced time of Transit" with the latest determination of its mean place by Mr. Henderson—but where there are observations of the same star both *above* and *below* the pole, independently of any Catalogue.

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* It will be perceived, on reference to the Catalogue, that the places of some of these stars depend on a greater nnmber of observations than are mentioned in this table. The reason is, that after December 1832, having received, through the kindness of Mr. Henderson (whose assistance on this and many other occasions, I beg most thankfully to acknowledge), the places of several stars in the neighbourhood of the South Pole (since published in the Royal Astronomical Society's *Memoirs*, Vol. VI.); and my attention being a great deal taken up with other matters, the mechanical adjustment in azimuth was dispensed with, and the remaining observations, which extend to April 1833, were numerically corrected for deviation, using Mr. Henderson's right ascension.

Stars.	No. of Obs.	Pos. of Lamp.	South Declin.	Zenith Distance.	Reduced Time of Transit, 1832·0.	Corr. for Col. and Flex.	Azimuthal Factor.	Meridian Error. Lamp	
								East.	West.
z Octantis, SP	3	East.	87° 26′	76° 38′	2h 14m 10s·15	+ 0s·30	+ 21·73	+·145	
* Octantis	1	East.	86 0	70 4	16 0 21·63	− 0·10	− 27·55	+·122	
——— SP	2	East.	....	78 4	4 0 17·95	+ 0·22			
σ Octantis	1	East.	89 15	73 19	16 58 33·8	− 0·80	−147·73	+·060	
——— SP	4	East.	....	74 49	4 58 23·4	+ 0·80			
* Octantis	2	East.	87 37	71 41	17 16 5·85	− 0·20	− 46·31	+·098	
——— SP	2	East.	....	76 27	5 16 0·74	+ 0·34			
* Octantis	2	West.	87 37	71 41	17 16 3·88	− 0·20	− 46·31	....	−·033
———	1	West.	....	76 27	5 16 5·94	+ 0·34			
* Octantis	4	West.	86 49	70 53	21 56 38·70	+ 0·13	− 16·95	....	−·139
———	3	East.	....	....	21 56 41·91	− 0·13	− 16·95	+·035	
τ Octantis	3	West.	88 24	72 28	22 58 9·82	+ 0·33	− 34·03	....	−·104
———	4	East.	....	....	22 58 15·00	− 0·33	− 34·03	+·028	
						Mean		+·081	−·092

To the north of the zenith, the meridian error is considered *positive* when inclined to the eastward, *negative* when to the westward; and the contrary when the telescope is directed to the south.

The mean error of both positions = α = $\pm 0{\cdot}087$, or $\pm 0{\cdot}090$ very nearly.

$$\text{At dec. } +10^\circ \quad \alpha \times \frac{\sin.\,(l-\delta)}{\cos.\,\delta} = A = \pm 0^s{\cdot}040$$

$$\text{At dec. } -40 \quad \alpha \times \frac{\sin.\,(l-\gamma)}{\cos.\,\gamma} = A' = \mp 0\,{\cdot}048$$

The place of the latter was, therefore, further corrected by

$$(A' - A) = \mp 0{\cdot}088$$

and the whole amount of the correction applied to the already reduced place was

$$(f' - f) + (A' - A) = \mp 0{\cdot}057$$

the upper sign being used when the lamp was east; the lower one when west.

In this way a table of corrections was computed, of which the following is an extract:—

Dec. −40° 00′	Correct. by form. =	∓0ˢ·057	Difference by observ. =	±0ˢ·050
−55 00	....	∓0·105	....	±0·118
−62 00	....	∓0·144	....	±0·170
−67 00	....	∓0·190	....	±0·185
−71 00	....	∓0·241	....	±0·246
−78 00	....	∓0·414	....	±0·482
−82 00	....	∓0·643	....	±0·552
−86 49	....	∓1·699	....	±1·600
−88 24	....	∓3·414	....	±3·080

Thus, it is seen that the discordances of the results are accounted for within narrow limits on the hypothesis I have adopted. If, however, there be any error in the assumed values of *a* and *c*, it will not materially affect the correctness of the Catalogue; for, with very few exceptions, the places there given depend on nearly an equal number of observations in both positions of the axis.

The clock is by Barraud. It has the usual dead-beat escapement, and a mercurial pendulum. Its performance during the whole time was extremely regular. The variation of rate from day to day, in a very few instances, amounted to 0ˢ·4; but, generally speaking, the limits were confined to ⅓d this quantity. It stands on a stone pillar, with a back of the same material, to which the case is screwed. This support, as well as those of the transit, are, of course, detached from the floor, or any other part of the building.

The Mural Circle

Is 4 feet in diameter; the length of the telescope is 5 feet, projecting 6 inches on each side beyond the rim of the circle. The aperture of its object-glass is 3·1 inches; the whole of which is employed, and shews a very distinct image. The observing power is 53·4.

There is nothing remarkable in the structure of the instrument. It is graduated to 5′; and the intermediate quantities are read off from microscopes. The clamps are fixed to the pier, and *bite* on a flat circle of brass, about 1¼ inch within the inner edge of the graduated circle, moving in a plane parallel to it.

The horizontal axis is 2 feet 9 inches; the extremities are of bell-metal, and work in collars of brass.

The pier is built of the same description of stone as those which support the transit; and similar precaution was taken to guard against dust. It is 6 feet long by 2 feet 10 inches thick, and about 10 feet high. To facilitate the reading off of the upper microscopes the top is made circular. Like the transit piers, it rests on a foundation of rock.

The instrument is provided with six microscopes, placed at equal distances round its circumference; all of which were employed. In this case, I believe the errors arising from defective graduation, and other imperfections of the instrument, will seldom be found to exceed 1″·0. But the following table will afford more satisfactory evidence on this point.

The telescope has been used on three different parts of the circle. The result obtained in each position is here shewn, and its difference from the mean result.

Stars.	Degrees and Minutes of N.P.D.	Seconds of N.P.D. in three Positions, reduced to 1830·0.						Mean.	Diff. from the Mean.		
		1st Pos.	N° of Obs.	2d Pos.	N° of Obs.	3d Pos.	N° of Obs.		1st Pos.	2d Pos.	3d Pos.
α Ursæ Maj.	27° 19′	60″·02	6	59″·05	8	60″·16	24	59″·90	+0″·12	−0″·85	+0″·26
α Persei	40 45	8·45	8	....	..	7·52	7	8·02	+0·43	....	−0·50
α Cygni	45 19	23·30	3	26·22	5	26·81	9	26·02	−2·73	+0·20	+0·79
α Lyræ	51 22	....	..	12·34	18	12·22	11	12·29	....	+0·05	−0·07
Castor	57 44	52·37	28	51·55	6	52·30	43	52·26	+0·11	−0·71	+0·04
Pollux	61 34	16·62	27	....	..	16·19	46	16·35	+0·27	....	−0·16
α Androm.	61 50	56·37	7	55·87	17	56·61	21	56·45	+0·92	−0·58	+0·16
ε Boötis	62 12	....	..	17·62	17	16·64	13	17·20	....	+0·42	−0·58
α Cor. Bor.	62 42	....	..	31·69	11	30·87	16	31·21	....	+0·48	−0·34
α Arietis	67 20	45·88	29	....	..	45·65	30	45·76	+0·12	....	−0·11
Arcturus	69 55	....	..	45·52	19	47·18	19	46·35	....	−0·83	+0·83
Aldebaran	73 50	25·19	25	....	..	26·67	30	26·00	−0·81	....	+0·67
β Leonis	74 28	43·72	4	42·00	26	41·50	25	41·89	+1·83	+0·11	−0·39
α Herculis	75 24	....	..	36·88	13	35·15	10	36·13	....	+0·73	−0·98
α Pegasi	75 42	29·67	5	....	..	29·53	22	29·56	+0·11	....	−0·03
γ Pegasi	75 45	44·31	12	....	..	44·72	15	44·54	−0·23	....	+0·18
Regulus	77 12	20·89	15	18·99	19	17·59	27	18·84	+2·05	+0·15	−1·25
γ Aquilæ	79 47	44·51	3	42·98	9	43·25	23	43·29	+1·22	−0·31	−0·04
α Aquilæ	81 34	31·15	5	29·05	14	28·53	24	29·00	+2·15	+0·05	−0·47

Stars.	Degrees and Minutes of N.P.D.	Seconds of N.P.D. in three Positions, reduced to 1830 0.						Mean.	Diff. from the Mean.		
		1st Pos.	Nº of Obs.	2d Pos.	Nº of Obs.	3d Pos.	Nº of Obs.		1st Pos.	2d Pos.	3d Pos.
α Orionis	82° 37′	57″·25	17	″....	..	58″·25	37	57″·93	−0″·68	″....	+0″·32
α Serpentis	83 1	....	..	61·60	29	62·08	16	61·77	....	−0·17	+0·31
γ Orionis	83 48	44·38	23	....	..	43·36	29	43·81	+0·57	....	−0·45
β Aquilæ	84 0	42·90	3	43·44	6	44·13	15	43·80	−0·90	−0·36	+0·33
Procyon	84 20	46·68	36	44·48	16	47·11	42	46·50	+0·18	−2·02	+0·61
α Ceti	86 34	57·50	38	....	..	57·55	22	57·52	−0·02	....	+0·03
δ Orionis	90 25	57·71	31	....	..	56·90	15	57·44	+0·27	....	−0·54
α Aquarii	91 8	33·67	5	33·08	4	32·46	20	32·75	+0·92	+0·33	−0·29
ζ Orionis	92 2	24·11	29	....	..	24·02	17	24·08	+0·03	....	−0·06
δ Ophiuchi	93 14	....	..	57·31	25	57·13	13	57·25	....	+0·06	−0·12
β Aquarii	96 18	53·52	8	54·11	5	53·85	11	53·80	−0·28	+0·31	+0·05
α Hydræ	97 55	35·80	17	33·87	24	34·07	46	34·35	+1·45	−0·48	−0·28
Rigel	98 24	18·27	33	....	..	18·42	33	18·34	−0·07	....	+0·07
Spica	100 16	16·77	4	16·56	38	18·73	33	17·52	−0·78	−0·96	+1·21
α² Capricorni	103 3	55·57	3	55·58	5	55·91	8	55·74	−0·17	−0·16	+0·17
α² Libræ	105 19	....	..	48·13	27	48·67	16	48·33	....	−0·20	+0·34
Sirius	106 29	23·30	40	22·67	13	23·32	48	23·23	+0·07	−0·56	+0·09
Antares	116 2	....	..	47·33	28	48·12	17	47·63	....	+0·30	+0·49
Fomalhaut	120 31	15·71	8	....	..	15·13	26	15·27	+0·44	....	−0·14
								Mean....	0·42	0·47	0·32

In taking the *mean* the signs have been disregarded, but each difference has been allowed an influence proportionate to the number of observations on which it depends.

Now, the mean of the three columns of differences is equal to 0″·40 nearly, hence the *probable error* (depending on the instrument only) of a result obtained in any *one* position of the telescope is about 0″·34.

The index error, or deviation from an assumed horizontal point, was found by the method of differences between *observed* and *tabulated* places, using *direct* observations only.

The details which follow will perhaps be more intelligible after shortly adverting to the principles of this method.

Let any star be selected for a zero point. It is not important that its place should be known more accurately than to be enabled to compute the effect of refraction; and, in order to avoid the uncertainties of this inequality, one should be selected not far from the zenith.

Angular distances are measured from this to as many other points in the heavens as are required; and their *relative* positions fixed with any degree of precision. By extending these angular measurements to circumpolar stars at both culminations, we obtain the polar distance of our zero star. Hence we have the error of the assumed place of the zero star, and consequently the proper correction to be applied to every other star whose position with regard to it is known.

Thus, a catalogue of polar distances or declinations may be formed without the direct intervention of latitude.

In practice, however, it is usual to refer observations to the zenith or horizon; and in order to obtain the reading of the circle corresponding to these points, we must assign some zenith distance or altitude to the zero star. It is not, however, at all necessary that the assigned zenith distance or altitude should be exact within nearer limits than those already mentioned; for, whatever be its error, it will, obviously, equally affect the places of the stars and pole. We shall, therefore, obtain correct polar distances, though perhaps we may have assumed an incorrect latitude. The latter may be determined afterwards by direct and reflected observations.

We have hitherto supposed *one* star only to have been employed for finding the horizontal point; but, as the relative positions of other stars become known, they will, of course, serve the purpose equally well; and, by taking the mean of several, the probable error of observation may be diminished.

The stars used for this purpose were at first confined to those only in Mr. POND's Catalogue of 720 Stars, exceeding 30° in altitude. Assuming

The altitude = N.P.D. in Mr. POND's Catalogue of 720 Stars − 15° 55′ 24″ *

This list was subsequently enlarged by the introduction of several southern stars, whose places had been previously well determined.

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* The latitude found by several direct and reflected observations of standard stars, in 1830, using the Greenwich mean places.

The observations were all referred to the north horizon; and the annexed table shews the angular distance of the South Pole from this point, according to the refractions of Young, Bessel, and Bradley.

Stars.	Right Ascension.	Distance of S. Pole from assumed N. Hor.			N° of Obs.	
		By Young's Refract.	Bessel's.	Bradley's.	Above pole.	Below pole.
σ Octantis	....	164° 4′ 33″·1	34″·4	30″·9	6	3
* Octantis	16 1	32·8	33·9	30·2	3	7
* Octantis	17 16	32·5	33·5	29·9	3	12
* Octantis	19 31	31·6	33·0	29·3	9	25
* Octantis	21 57	32·8	34·2	30·5	6	13
τ Octantis	....	33·3	34·2	30·6	10	17
	Mean =	164 4 32·7	33·9	30·2		
	Supplement =	15 55 27·3	26·1	29·8		

The Supplement, if the assumed altitudes of the stars, from which the index error was derived, were correct, is the *latitude*. But it has not shewn that they were so. For the present, therefore, the Supplement is to be considered only as a quantity to be added to the recorded distances from the north horizon to convert them to North Polar distances. And for the purpose of forming a catalogue, if we use *direct* obervations only, this is all we require. But the latitude is so important an element in a geographical sense, that we shall proceed to determine how much the quantity above given is in error.

If the altitudes of the index-error stars were correctly assumed, observations by *reflection* would give the same amount of index error (with a contrary sign) as those by *direct vision;* if not, half the difference $\frac{R - D}{2}$ is the correction to be applied algebraically both to them and the latitude.

Stars.	Z D	R − D	Nº of Obs.		
			R	D	
α Ceti	+19° 21′	+1″·28	3	3	−0·57
Aldebaran	+32 5	+1·24	5	7	−0·61
Rigel	+ 7 31	+0·81	8	11	−1·04
α Columbæ	−18 14	+1·95	9	9	+0·10
α Orionis	+23 18	+1·92	9	14	+0·07
Canopus	−36 41	+1·85	12	16	0·00
ε Canis Maj.	−12 49	+2·78	9	11	+0·93
π Argûs	−20 52	+2·32	10	13	+0·47
γ^2 Argûs	−30 55	+2·68	8	13	+0·83
ι Argûs	−43 2	+0·09	8	15	−1·76
δ Argûs	−38 10	+2·01	7	11	+0·16
λ Argûs	−26 50	+2·62	9	13	+0·77
α Hydræ	+ 7 0	+2·62	13	19	+0·77
	Mean =	+1·85			0·62
	$\frac{R-D}{2}$ =	+0·92			0·31

The last column contains the differences of individual results from the mean, or twice the amount of the term Mr. POND calls "the correction," which he has introduced into the Reductions of the Greenwich Catalogue, and which he supposes to be occasioned partly by errors of the instrument, partly by those of observation.

Several observations in 1831 gave $\frac{R-D}{2} = +1''\cdot04$, the mean of the two results, therefore = + 0″·98, which, added to − 15° 55′ 27″·3 (the Supplement above given) gives the value of the latitude, according to YOUNG's refraction, = − 15° 55′ 26″·32, which agrees nearly with that obtained by the solstices,* as shewn in the following table : —

Distance of the Mean Solstice from the North Horizon, 1830·0.

Year of Obs.	December.	June.
1829	97° 32′ 15″·92	50° 36′ ″ ....
1830	15·92	52·90
1831	15·05	52·84
1832	15·25	52·99
Mean	97 32 15·53	50 36 52·90

90 − ½ sum = lat. = −15° 55′ 25″·79
½ diff. = obliq. =23° 27′ 41″·31

These results differ slightly from those I forwarded some time ago to the Royal Astronomical Society. The difference arises from having corrected the Obs. of 1829 and 1830 for the error of 0″·98 in the position of the hor. point: and in 1831 and 1832, having obtained observations both direct and reflected, I have taken the mean without regarding index error. The stability of the instrument during the solstices justified me in so doing.

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* I may remark here, that in all solar observations the circle was carefully screened from the sun's rays.

For the present, I consider

The latitude of the Observatory $= -15^\circ\ 55'\ 26''\cdot 0$
The longitude,* from Greenwich $= +\ 0^h\ 22^m\ 54^s\cdot 6$

The right ascensions in the Catalogue are dependent on the mean places given in the *Nautical Almanac* of 1830 *et seq.*, which are reckoned from MASKELYNE's place of the equinox, $+0^s\cdot 20$.

Our own observations, which will be found in the Appendix to this Introduction, give the place of the equinox = MASKELYNE's $+0^s\cdot 137$.

The reduction from the *apparent* to the *mean* places was accomplished by a table† of constants derived from Mr. FALLOWS' general tables (the 2d Series in Dr. PEARSON's collection). The coefficients of aberration and lunar nutation were respectively assumed $= 20''\cdot 397$ and $9''\cdot 20$.

In the computations for declination we used YOUNG's refractions, given in the *Nautical Almanac*, with the in-door thermometer.

The meteorological instruments were made by GILBERT. Mr. HENDERSON, returning from the Cape, took the trouble to compare the barometer with one of Sir JOHN HERSCHEL's, and has favoured me with the following memorandum: —

"In the course of my voyage from the Cape, Sir J. HERSCHEL's barometer was compared with the barometer in the mural-circle room of the Observatory, St. Helena; and the former having been allowed to stand beside the latter for twenty-two hours on June 14th, 1833, the Observatory barometer was found to shew the altitude of the mercurial column greater by 0·076 inch than Sir J. HERSCHEL's, neither being corrected for capillarity. The Observatory barometer was read off by Mr. ARMSTRONG, assistant astronomer; and Sir JOHN HERSCHEL's by me.

Inches.
Observatory barometer .... = 29·505 } Therm. 72°.
Sir J. Herschel's.............. = 29·429 }
Difference .... = 0·076"

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* See the Appendix.

† This table was computed by Captain RONALD for the use of the Cape Observatory. In several doubtful cases the numbers were re-examined; and I cannot recall a single instance in which I found them wrong.

On January 17, 1832, Sir J. HERSCHEL's barometer was compared by Mr. HUDSON with the Royal Society's, and shewed the altitude of the mercurial column 0·048 inch *lower*.

On its return from the southern hemisphere it was again compared by Mr. HUDSON with the Royal Society's Standard at various times between October 10 and October 23, 1833, and the readings were 0·050 *lower*. The readings, therefore, of the barometer at St. Helena *exceed* those of the Royal Society's Standard by 0·027 inch.

We were less fortunate in obtaining a verification of the thermometers. At present, their accuracy can only be inferred from their agreement with several other instruments by the same maker.

Considerable confusion at present exists in our system of nomenclature, much of which, doubtless, might, and it is very desirable should, be removed. But it appears to me that the task of revision would be more properly committed to an assemblage of astronomers than to the discretion of an individual, who, possibly, by promulgating a notation which failed in obtaining general consent, might add to the difficulties he wished to obviate. I have, therefore, introduced no alteration of my own in this part of the Catalogue. The names of those stars which were observed by FLAMSTEED have been taken from Mr. BAILY's valuable edition of FLAMSTEED's Catalogue, in which that gentleman, with his usual care and ability, has corrected many mistakes committed by the editors of the "*Historia Cœlestis*," in adopting as permanent designations the temporary symbols which FLAMSTEED used for the sake of convenience in the course of observation; and has also, in some instances, restored the notation of BAYER, from which FLAMSTEED had inadvertently departed. In the more southern heavens I have adopted the constellations of LA CAILLE; but as it appears questionable whether, in a future arrangement of the nomenclature, it would be desirable to retain the numerous letters* which that great astronomer employed, I have inserted in the column "Names" those only which belong to the five principal stars of a constellation. My rule has been never to *exceed* this number, nor to attach a letter to any star below the 4th magnitude, so that in some of the minor constellations letters are altogether omitted: but, that there may be no difficulty in referring to LA CAILLE, the number and letter by which each star is designated in the "*Cœlum Australe*" are given in the last column of the left page of the Catalogue. It is known that LA CAILLE divided the constellation *Argo* in three parts,—*in Velis, in Carinâ, in Puppi;* but as I am not aware of any advantage to be derived from this division, I have omitted to notice it in the column "Names;" but in that which contains LA CAILLE'S number and letter, the stars he has allotted to these several portions of the constellation are respectively distinguished by the letters "in V," "in C," "in P."

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* It was considered desirable to restore, if possible, BAYER's notation of the southern, as well as the northern, hemisphere; and my friend, Mr. SHEEPSHANKS, very kindly took considerable trouble to identify BAYER's stars with those of LA CAILLE. In this task he was generally successful as far as BAYER had PTOLEMY's Catalogue to guide him, viz. to about 54° of southern declination. For his information south of that parallel, BAYER was dependent on the observations and reports of the early navigators to America, which, as may be supposed, were very vague; and his maps of those parts are so imperfect as to defy the

By this arrangement I hope all confusion will be obviated; — every star may easily be identified with the corresponding one of LA CAILLE; — and, should the subject of a revision of the nomenclature engage the attention of astronomers, the field will in some measure be prepared for the discussion.

The stars' *magnitudes* and *annual variations* are chiefly taken from the Catalogue of the Royal Astronomical Society. In a few instances, where it appeared requisite, the magnitudes have been altered.

In the column after the *annual variation*, is given the number of observations on which each place depends. The value of these numbers may be estimated from the following table.

I find the *probable error* of a single observation, or the error whose *probability* is $\frac{1}{2}$, to be,

In Right Ascension.	In Declination.
$=0^{s}\cdot075 \times$ sec. dec.	$=0''\cdot78$

Hence the *probable error* of the mean of

5 obs.	.... $=0\cdot034 \times$ sec. dec.	5 obs.	.... $=0''\cdot35$	Exclusive of the error occasioned by the uncertainty of refraction.
10	.... $=0\cdot024 \times$ sec. dec.	10	.... $=0\cdot25$	
15	.... $=0\cdot019 \times$ sec. dec.	15	.... $=0\cdot20$	
20	.... $=0\cdot017 \times$ sec. dec.	20	.... $=0\cdot17$	

The last five columns contain the differences between the places of the

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ingenuity of Mr. SHEEPSHANKS to trace any resemblance between them and the actual state of the heavens. Under these circumstances the most obvious course was to follow altogether the notation of LA CAILLE.

present Catalogue and those of La Caille; Rumker, in his Preliminary Catalogue; Taylor, in the Results of Madras Observations for the year 1831; of the Greenwich Catalogue of 1112 stars; and of the Astronomical Society's. The numbers there given, applied *algebraically* to the places in the Catalogue, will give the places according to these several authorities.

Sometimes the evidence appears against this Catalogue; in such cases the reductions have been re-examined, and the *data* from which its results were deduced are given in the Notes appended to the Catalogue.

La Caille's places were taken from Mr. Baily's paper on the subject in the *Memoirs* of Royal Astronomical Society, Vol. V., page 93, and have been reduced to 1830 by the annual precession due to the middle period, 1790.

In 125 comparisons, there are differences

In Right Ascension.			In Declination.		
Not exceeding	$0^s\cdot3$	47	Not exceeding	$3''\cdot0$	39
......	$0\cdot5$	16	......	$7\cdot0$	43
......	$1\cdot0$	29	......	$10\cdot0$	16
......	$2\cdot0$	15	......	$15\cdot0$	9
Upwards of	$2\cdot0$	18	Upwards of	$15\cdot0$	18

The two last classes may probably, in great part, be ascribed to "proper motion."* But I have ventured to introduce a correction on this account in two instances only,—α^1 and α^2 *Centauri* in R.A.,—where the change is too great to be neglected even in reducing the observations of two following years to the same epoch.

By comparison with La Caille, the annual proper motion of α^1 Centaur. $= -0^s\cdot465$
of α^2 ——— $= -0\cdot467$
Rumker................ of α^2 ——— $= -0\cdot477$
Taylor .... of α^2 ——— $= -0\cdot470$
By differences of R.A. (on the same days) between β and α^2 Centauri, in 1831 and 1832.............. } α^2 ——— $= -0\cdot470$

I have considered the proper motion of both stars $= -0^s\cdot470$.

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* In the last class are two or three stars within 10° of the pole, which ought to have been reduced by a stricter formula, if La Caille's observations in this situation could be depended upon.

In other *suspected* cases, the places, reduced to the beginning of the year in which the observations were made, are inserted in the Notes.

In 322 comparisons of R.A. with Greenwich,

The differences not exceeding	$0^{s}\cdot10$	= 190
....	$0\cdot20$	= 95
....	$0\cdot30$	= 30
....	$0\cdot40$	= 5
....	$0\cdot50$	= 2

The seven stars in which the differences exceed $0^{s}\cdot30$, are

No. 29	Greenwich diff.	$= +0^{s}\cdot37$	Madras diff.	$= +0^{s}\cdot28$
228	......	$= +0\cdot45$	......	$= +0\cdot09$
299	......	$= +0\cdot40$	......	$= +0\cdot23$
324	......	$= +0\cdot32$	......	$= +0\cdot26$
349	......	$= +0\cdot34$	......	$= +0\cdot19$
427	......	$= +0\cdot46$	......	$= -0\cdot38$
572	......	$= +0\cdot31$	......	$= +0\cdot18$

where (except No. 427, ο *Ophiuchi*[*]) they seem to proceed from the errors of observation falling in opposite directions.

In 359 comparisons of R.A. with Mr. T. Taylor's Madras Catalogue, there are

Differences not exceeding	$0^{s}\cdot10$	....	188
....	$0\cdot20$	....	98
....	$0\cdot30$	....	51
....	$0\cdot40$	....	15
....	$0\cdot50$	and upwards	7

The seven stars in the last class are

No. 214	λ Argûs	Diff.	$= -0^{s}\cdot58$	Rumker's diff.	$= -0^{s}\cdot26$
224	ψ Argûs	....	$= +0\cdot57$	....	$= +0\cdot01$
246	θ^{1} Argûs	....	$= +0\cdot57$		
290	β Muscæ	....	$= +0\cdot44$	....	$= -0\cdot28$
546	∂ Indi	....	$= +0\cdot41$		
600	η Toucani	....	$= +0\cdot53$		
602	ι Toucani	....	$= -0\cdot69$	....	$= +0\cdot77$

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[*] See note to this star.

In three cases out of the number, Mr. Rumker's determination leans rather towards ours. The remainder have been re-examined; and, for further information concerning them and the 15 stars whose differences exceed 0ˢ·30, the reader is referred to the Notes.

It is not so easy to institute an examination of declinations. Of the *six* Catalogues here compared, *each one* has been reduced by different refractions; and before we can arrive at any satisfactory conclusion as to their agreement, they must be cleared not only of the *relative* but the *actual* errors of the tables employed. It is not enough that observations are reduced by the same table; for, if that table be imperfect, we shall in vain look for consistent results. For example, had we used Bradley's refractions, it will be seen, on inspection of the table of distances of the South Pole from the North Horizon, in a preceding page, that our differences from Greenwich would have been more than *double* what they now are.

To enter fully into such an inquiry would far exceed our present limits. It may not, however, be uninteresting to ascertain how far the present catalogue can be reconciled with that of Greenwich.

It will be seen that our declinations, generally, are more to the south. From the equator to $-30°$ the differences are about $+2''\cdot6$: from $-30°$ to $-33°$ this amount is much reduced, and sometimes appears with a contrary sign: from $-33°$ to $-35°$, which is the southern limit of the Greenwich Catalogue, the differences vary from $-1''\cdot0$ to upwards of $-20''\cdot0$.

These are numbers resulting from a comparison of Catalogues: one reduced by Bradley's refraction; the other by Young's. Let us see what alteration is effected when both are reduced by the same table.

If we consider that side of the zenith on which the elevated pole is situated $+$: the opposite side $-$: and if

$$(Y - B) \text{ at the pole} = \Delta p$$
$$(Y - B) \text{ at the star} = \Delta s$$

Y being Young's refraction; B Bradley's,

$$\Delta p - \Delta s$$

is the correction to be applied to places reduced by Bradley's refraction to adapt them to Young's.

The barometer at Greenwich being 30·00 inches, and the thermometer $+50°$ of Fahrenheit.

At Dec. −33°	$\Delta p-\Delta s$ = +0″·7	At Dec. + 5°	$\Delta p-\Delta s$ = −1″·0
−32	= −0·1	+15	= −0·7
−31	= −0·5	+25	= −0·6
−30	= −1·5	+35	= −0·5
−28	= −1·1	+45	= −0·4
−25	= −1·7	+55	= −0·3
−20	= −1·6	+60	= −0 3
−15	= −1·5	+65	= −0·2
− 5	= −1·2		

These numbers, applied *algebraically* to the Greenwich declinations, will reduce the differences, but not more than *one half*. So, it appears that YOUNG's table will not give consistent results at two stations separated by a large arc of latitude.

That which will, I believe, best answer this condition is BESSEL's. I have, therefore, computed similar corrections for adapting both catalogues to it.

Table I. For adapting the Greenwich Declinations to BESSEL's Refractions.

Declination.		Declination.		Declination.		Declination.	
−33°	$\Delta p-\Delta s$ = +1″·1	−25°	$\Delta p-\Delta s$ = −2″·8	+15°	$\Delta p-\Delta s$ = −1″·2	+60°	$\Delta p-\Delta s$ = −0″·3
−32	= +0·2	−20	= −2·7	+25	= −1·0	+65	= −0·2
−31	= −1·2	−15	= −2·5	+35	= −0·8		
−30	= −1·8	− 5	= −1·9	+45	= −0·7		
−28	= −2·5	+ 5	= −1·5	+55	= −0·4		

Table II.* For adapting the St. Helena Declinations to BESSEL's Refractions.

Declination.		Declination.		Declination.		Declination.	
−85°	$\Delta p-\Delta s$ = 0″·0	−35°	$\Delta p-\Delta s$ = +1″·0	+15°	$\Delta p-\Delta s$ = +1″·5	+50°	$\Delta p-\Delta s$ = +2″·2
−75	= +0·4	−25	= +1·1	+25	= +1·6	+55	= +2·4
−65	= +0·6	−15	= +1·2	+30	= +1·7	+60	= +2·6
−55	= +0·8	− 5	= +1·3	+35	= +1·8	+65	= +2·2
−45	= +0·9	+ 5	= +1·4	+45	= +2·0		

* Barometer =29·40. Temperature of the mercury =+70°·0 } Fahrenheit.
.... air =+67°·0 }

The numbers to be applied with their *proper signs* to the respective declinations.

I shall conclude with a comparative table of the positions of some of the principal standard stars, according to our own determination and those given by Mr. Pond in the Greenwich Catalogue of 1112 Stars, and by Bessel in the *Berliner Jahrbuch* of 1830, *increasing* Bessel's right ascensions $0^s{\cdot}07$, which is about the difference between the equinoctial point which he has assumed and that from which we have reckoned.

The columns $P' - J$ and $B' - J$ contain the differences obtained by direct comparison of our declinations with those of the above-named eminent observers.

$P'' - J$ shews the differences from Pond's Catalogue, when his places are corrected by Young's refraction.

$P''' - J$ and $B'' - J$ respectively shew the differences which obtain between our places and those of Pond and Bessel, when all are reduced by Bessel's refraction.

The numbers in these columns are to be applied algebraically to our places, in order to obtain the places according to the authorities with which they are compared.

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Differences from	
						Pond. P−J	Bessel. B−J
1	β Cephei	3	21^{h} 26^{m} 26^{s}·17	+ 0^{s}·811	9	− ^{s}·06	^{s}·00
2	δ Draconis	3	19 12 29·55	+ 0·023	16	+ ·13	....
3	α Draconis	3·4	13 59 47·40	+ 1·625	28	+ ·06	....
4	α Ursæ Major ..	1·2	10 53 9·76	+ 3·811	78	+ ·12	+ ·07
5	α Cephei	3	21 14 31·04	+ 1·416	19	− ·06	+ ·02
6	δ Ursæ Major ..	3	12 6 58·43	+ 3·003	33	+ ·04	....
7	α Cassiopeæ....	3	0 30 54·67	+ 3·330	30	− ·06	+ ·06
8	γ Ursæ Major ..	2	11 44 51·04	+ 3·192	56	− ·03	+ ·20
9	β Draconis	2	17 26 35·69	+ 1·349	19	+ ·10	....
10	γ Draconis	2	17 52 39·78	+ 1·388	23	− ·01	+ ·03
11	η Ursæ Major ..	2·3	13 40 49·98	+ 2·353*	35	− ·01	+ ·02
12	α Persei	2·3	3 12 13·74	+ 4·221	48	− ·04	+ ·10
13	Capella........	1	5 4 8·69	+ 4·402	85	− ·08	− ·02
14	β Aurigæ	2	5 47 3·69	+ 4·398	47	− ·07	....
15	α Cygni	1	20 35 38·36	+ 2·040	22	+ ·02	·00
16	α Lyræ	1	18 31 11·10	+ 2·010	44	+ ·03	− ·05
17	β Lyræ	3	18 43 48·23	+ 2·211	8	+ ·14	....
18	Castor	3	7 23 44·43	+ 3·856	90	+ ·06	....
19	β Tauri	2	5 15 33·12	+ 3·779	28	+ ·02	+ ·01
20	Pollux	2	7 34 54·18	+ 3·682*	101	+ ·05	− ·04
21	α Andromedæ ..	1	23 59 37·08	+ 3·067	25	− ·06	− ·10
22	ε Boötis........	3	14 37 33·72	+ 2·621	39	+ ·05	....
23	α Cor. Bor.	2	15 27 29·61	+ 2·526	32	− ·02	− ·03
24	α Arietis	3	1 57 36·49	+ 3·342	58	·00	− ·02
25	Arcturus	1	14 7 54·61	+ 2·731*	41	+ ·02	+ ·03
26	Aldebaran	1	4 26 10·51	+ 3·423	71	·00	− ·02
27	β Leonis	2·3	11 40 23·03	+ 3·064	66	+ ·01	− ·05
28	α Herculis	3·4	17 6 53·94	+ 2·729	29	+ ·04	+ ·07
29	α Pegasi	2	22 56 17·95	+ 2·975	41	+ ·03	·00
30	γ Pegasi	2·3	0 4 29·53	+ 3·075	28	+ ·01	·00
31	ζ Aquilæ	3	18 57 35·86	+ 2·754	12	+ ·02	....
32	Regulus	1	9 59 18·67	+ 3·221	78	+ ·04	− ·02

N°	Mean Declination, 1830.	Annual Variation.	N° of Obs.	Differences from				
					Pond.		Bessel.	
				P′ − J	P″ − J	P‴ − J	B′ − J	B″ − J
1	+ 69° 48′ ..″	+ 15″·71	..	....″	....″	....″	....″	....″
2	+ 67 21 ..	− 6·23	..	....	....	....	....	....
3	+ 65 11 25·9	− 17·37	7	− 0·8	− 1·0	− 3·2	....	....
4	+ 62 39 59·6	− 19·20	45	+ 1·5	+ 1·2	− 1·2	+ 0·4	− 2·0
5	+ 61 51 58·9	+ 15·04	3	+ 3·7	+ 3·4	+ 1·1	+ 2·5	+ 0·2
6	+ 57 58 37·1	− 20·03	5	+ 3·1	+ 2·8	+ 0·3	....	....
7	+ 55 36 11·7	+ 19·86	10	+ 1·6	+ 1·3	− 1·2	+ 1·0	− 1·4
8	+ 54 38 26·0	− 20·00	3	− 1·2	− 1·5	− 4·0	− 3·3	− 5·7
9	+ 52 25 49·0	− 2·91	14	+ 0·8	+ 0·4	− 2·0	....	....
10	+ 51 30 42·1	− 0·64	16	+ 1·3	+ 0·9	− 1·4	+ 0·4	− 1·8
11	+ 50 9 ..	− 18·13	..	....	....	....	....	....
12	+ 49 14 52·0	+ 13·40	25	+ 2·9	+ 2·5	+ 0·1	+ 2·1	+ 0·1
13	+ 45 48 ..	+ 4·84	..	....	....	....	....	....
14	+ 44 55 ..	+ 1·13	..	....	....	....	....	....
15	+ 44 40 33·9	+ 12·59	18	+ 1·4	+ 1·0	− 1·3	+ 0·3	− 1·7
16	+ 38 37 47·7	+ 2·72	45	+ 1·8	+ 1·3	− 0·8	− 0·2	− 2·0
17	+ 33 10 12·2	+ 3·81	13	+ 1·9	+ 1·4	− 0·7	.....	....
18	+ 32 15 7·9	− 7·16	134	+ 2·9	+ 2·4	+ 0·3	+ 1·0	− 0·7
19	+ 28 27 ..	+ 3·86	..	....	....	....	....	....
20	+ 28 25 43·6	− 8·06	116	+ 2·9	+ 2·3	+ 0·3	+ 0·8	− 0·9
21	+ 28 9 3·7	+ 20·04	35	+ 2·8	+ 2·2	+ 0·2	+ 2·0	+ 0·3
22	+ 27 47 42·9	− 15·49	36	+ 0·7	+ 0·1	− 2·0	....	....
23	+ 27 17 29·0	− 12·38	49	+ 2·4	+ 1·8	− 0·3	+ 0·8	− 0·8
24	+ 22 39 14·3	+ 17·46	71	+ 2·9	+ 2·3	+ 0·2	+ 1·4	− 0·2
25	+ 20 4 14·0	− 18·96*	57	+ 3·3	+ 2·6	+ 0·7	+ 1·5	0·0
26	+ 16 9 34·0	+ 7·98	95	+ 3·2	+ 2·5	+ 0·5	+ 1·5	0·0
27	+ 15 31 18·4	− 19·97	97	+ 2·6	+ 1·9	− 0·1	+ 0·8	− 0·7
28	+ 14 35 24·3	− 4·60	37	+ 3·0	+ 2·3	+ 0·3	+ 0·2	− 1·3
29	+ 14 17 30·4	+ 19·27	42	+ 3·6	+ 2·9	+ 0·9	+ 1·3	− 0·2
30	+ 14 14 15·3	+ 20·04	28	+ 3·0	+ 2·3	+ 0·3	+ 1·2	− 0·3
31	+ 13 37 0·1	+ 4·98	3	+ 3·0	+ 2·3	+ 0·3	....	....
32	+ 12 47 41·3	− 17·33	108	+ 1·9	+ 1·1	− 0·9	− 0·9	− 2·4

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Differences from	
						Pond. P−J	Bessel. B−J
			h m s	s		s	s
33	γ Aquilæ	3	19 38 10·67	+ 2·849	53	+ ·03	+ ·05
34	α Aquilæ	1·2	19 42 29·35	+ 2·954*	73	+ ·01	·00
35	α Orionis	1	5 45 58·26	+ 3·241	18	+ ·02	·00
36	α Serpentis	2·3	15 35 54·06	+ 2·936	47	− ·01	·00
37	γ Orionis	2	5 16 —	+ 3·210	..	....	....
38	β Aquilæ	3·4	19 46 57·77	+ 2·943	46	+ ·06	+ ·08
39	Procyon	1·2	7 30 23·94	+ 3·143	103	+ ·14	+ ·04
40	α Ceti	2·3	2 53 24·14	+ 3·123	52	− ·05	− ·04
41	δ Aquilæ	3·4	19 16 55·64	+ 3·007	7	− ·03	....
42	δ Orionis	2	5 23 19·51	+ 3·058	32	+ ·06	....
43	α Aquarii	3	21 57 3·08	+ 3·082	26	+ ·01	− ·01
44	ζ Orionis	3	5 32 11·07	+ 3·021	32	·00	....
45	δ Ophiuchi	3	16 5 26·72	+ 3·135	28	− ·06	....
46	β Aquarii	3	21 22 36·34	+ 3·162	35	− ·06	....
47	α Hydræ	2	9 19 14·05	+ 2·948	90	+ ·02	− ·09
48	Rigel	1	5 6 22·36	+ 2·876	102	− ·05	− ·07
49	Spica	1	13 16 14·88	+ 3·147	64	− ·02	+ ·04
50	α^2 Capricorni ...	4	20 8 37·06	+ 3·331	29	− ·04	+ ·02
51	α^2 Libræ	3	14 41 29·28	+ 3·305	42	+ ·08	+ ·04
52	Sirius	1	6 37 39·41	+ 2·643*	117	− ·11	− ·07
53	Antares	1	16 18 59·87	+ 3·659	45	− ·11	+ ·03
54	Fomalhant	1	22 48 14·55	+ 3·311	65	− ·22	+ ·03

Nº	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	Differences from				
					Pond.		Bessel.	
				P′ − J	P″ − J	P‴ − J	B′ − J	B″ − J
33	+ 10° 12′ 16″·7	+ 8″·33	54	+ 2″·7	+ 1″·9	− 0″·1	+ 0″·3	− 1″·2
34	+ 8 25 31·1	+ 8·67	48	+ 2·2	+ 1·4	− 0·6	− 0·2	− 1·6
35	+ 7 22 2·2	+ 1·23	88	+ 2·9	+ 2·0	+ 0·1	+ 0·9	− 0·5
36	+ 6 57 58·1	− 11·79	78	+ 2·5	+ 1·5	− 0·4	− 1·0	− 2·4
37	+ 6 11 16·4	+ 3·82	71	+ 3·1	+ 2·4	+ 0·4	....	....
38	+ 5 59 16·1	+ 8·48*	31	+ 3·3	+ 2·3	+ 0·4	− 0·2	− 1·6
39	+ 5 39 13·3	− 8·68*	138	+ 2·7	+ 1·7	− 0·2	− 0·6	− 2·0
40	+ 3 25 2·5	+ 14·58	67	+ 1·9	+ 0·9	− 0·9	− 0·1	− 1·5
41	+ 2 46 55·2	+ 6·60	23	+ 3·6	+ 2·6	+ 0·5	....	....
42	− 0 25 57·4	+ 3·19	46	+ 2·5	+ 1·4	− 0·5	....	....
43	− 1 8 32·8	+ 17·23	31	+ 2·3	+ 1·2	− 0·7	− 0·6	− 1·9
44	− 2 2 24·1	+ 2·43	46	+ 3·0	+ 1·9	0·0	....	....
45	− 3 15 0·2	− 9·61	45	+ 2·3	+ 1·1	− 0·8	....	....
46	− 6 18 53·7	+ 15·50	36	+ 2·8	+ 1·4	− 0·5	....	....
47	− 7 55 34·3	− 15·31	145	+ 2·8	+ 1·5	− 0·5	− 0·3	− 1·6
48	− 8 24 18·2	+ 4·65	102	+ 2·6	+ 1·3	− 0·8	+ 0·4	− 0·9
49	− 10 16 17·6	− 18·94	98	+ 2·7	+ 1·4	− 0·7	− 0·3	− 1·6
50	− 13 3 55·8	+ 10·67	17	+ 3·3	+ 1·8	− 0·3	− 1·4	− 2·6
51	− 15 19 48·5	− 15·27	60	+ 2·9	+ 1·4	− 0·8	− 0·1	− 1·3
52	− 16 29 23·5	− 4·42*	171	+ 3·1	+ 1·6	− 0·6	+ 1·3	0·0
53	− 26 2 47·8	− 8·55	62	+ 4·2	+ 2·5	+ 0·3	− 1·5	− 2·6
54	− 30 31 15·8	+ 19·07	58	+ 1·3	+ 0·2	− 1·5	− 4·5	− 5·5

Mean of the above.

	P′−J	P″−J	P‴−J	B′−J	B″−J
From +65° to +30°......	+ 1″·61	+ 1″·24	− 1″·08	+ 0″·47	− 1″·69
From +30° to 0°......	+ 2·74	+ 1·97	− 0·02	+ 0·54	− 0·96
From 0° to −30°......	+ 2·75	+ 1·44	− 0·57	− 0·78	− 2·00

APPENDIX.

Result of Observations to determine the Correction of the assumed Equinoctial Point.

VERNAL EQUINOX.

Date. 1831.	Limb.	Right Ascension of ⊙				Correction.
		Hour.	Min.	Seconds (computed).	Seconds (observed).	
Feb. 28	L	22	43	14·07	14·25	−0·18
Mar. 1	U	22	46	57·86	58·98	−1·12
10	U	23	20	22·97	23·35	−0·38
11	L	23	24	4·31	3·91	+0·40
12	U	23	27	43·82	44·60	−0·78
13	L	23	31	24·99	24·47	+0·52
14	U	23	35	3·87	4·53	−0·66
16	L	23	42	23·36	23·72	−0·36
17	L	23	46	2·68	2·70	−0·02
20	L	23	56	58·83	58·76	+0·07
21	U	0	0	36·84	37·13	−0·29
22	L	0	4	15·31	15·39	−0·08
23	U	0	7	53·33	53·37	−0·04
25	U	0	15	8·99	9·59	−0·60
26	L	0	18	47·61	47·34	+0·27
27	U	0	22	24·99	25·19	−0·20
30	L	0	33	19·20	18·73	+0·47
31	U	0	36	56·25	56·78	−0·53
April 1	L	0	40	35·08	34·83	+0·25
2	U	0	44	12·35	13·03	−0·68
8	L	1	6	5·61	5·36	+0·25
14	U	1	28	6·00	7·18	−1·18
16	U	1	35	28·96	30·20	−1·24
18	U	1	42	53·88	54·37	−0·49
19	L	1	46	36·59	36·99	−0·40
20	U	1	50	19·68	20·07	−0·39
1832.						
Feb. 21	U	22	15	46·47	46·56	−0·09
23	L	22	23	24·87	24·66	+0·21
24	U*	22	27	13·35	12·95	+0·40
26	L*	22	34	47·67	47·54	+0·13
Date. 1832.	Limb.	Hour.	Min.	Seconds (computed).	Seconds (observed).	Correction.
Feb. 27	L	22	38	34·00	33·52	+0·48
28	U*	22	42	19·01	19·33	−0·32
29	U	22	46	5·12	4·74	+0·38
Mar. 1	U	22	49	49·08	49·31	−0·23
2	L*	22	53	34·13	33·58	+0·55
4	U	23	1	0·28	0·85	−0·57
8	L	23	15	49·92	49·47	+0·45
11	U	23	26	51·93	51·94	−0·01
13	U*	23	34	11·72	11·92	−0·20
14	L*	23	37	51·59	51·56	+0·03
20	U	23	59	43·90	44·17	−0·27
21	L	0	3	22·27	22·31	−0·04
22	U	0	6	59·87	59·40	+0·47
27	U	0	25	10·15	10·47	−0·32
28	L	0	28	48·23	48·55	−0·32
29	U	0	32	26·33	26·57	−0·24
30	L	0	36	4·38	4·76	−0·38
April 3	U	0	50	37·85	38·19	+0·34
5	L*	0	57	56·32	55·82	+0·50
6	L	1	1	34·89	34·69	+0·20
8	U*	1	8	53·73	54·29	−0·56
9	U	1	12	32·65	33·00	−0·35
11	U	1	19	52·97	52·81	+0·16
20	L	1	53	9·25	9·57	−0·32

Mean of 30 obs. of upper limb : correction = −0·356

24 obs. of lower limb .... = +0·112

Mean .... = −0·122

Correction for ⊙'s lat. = +0·003

Correct. for assumed place of equinox = −0·119

* Reflected Observations.

AUTUMNAL EQUINOX.

Date. 1831.	Limb.	Right Ascension of ⊙				Correction.	Date. 1832.	Limb.	Right Ascension of ⊙				Correction.
		Hour.	Min.	Seconds (computed).	Seconds (observed).				Hour.	Min.	Seconds (computed).	Seconds (observed).	
Sept. 3	L	10	46	56·23	56·01	+0^{s}·22	Sept. 11	U	11	18	31·24	31·06	+0^{s}·18
8	U	11	5	0·62	0·49	+0·13	13	U*	11	25	41·33	41·65	−0·32
9	L	11	8	36·95	36·91	+0·04	15	L*	11	32	52·12	52·87	−0·75
12	L	11	19	24·63	24·46	+0·17	20	U	11	50	50·19	50·08	+0·11
13	U*	11	22	59·48	0·03	−0·55	22	L*	11	58	0·79	1·33	−0·54
Oct. 19	L*	13	34	1·63	1·91	−0·28	23	U	12	1	37·37	37·32	+0·05
20	U*	13	37	48·40	47·71	+0·69	24	L*	12	5	13·13	13·02	+0·11
21	L	13	41	34·36	33·95	+0·41	25	U	12	8	49·22	49·28	−0·06
1832.							27	L	12	16	2·01	2·12	−0·11
Aug. 21	U*	10	2	9·15	9·05	+0·10	Oct. 12	U*	13	10	44·99	44·96	+0·03
31	L	10	38	47·78	47·91	−0·13	16	U	13	26	37·71	36·88	+0·83
Sept. 5	L	10	56	54·27	54·62	−0·35	25	U	13	59	40·64	40·97	−0·33
6	U	11	0	31·51	31·23	+0·28							

Mean of 13 obs. of upper limb........ = +0^{s}·088
11 obs. of lower limb........ = −0·110
Mean .... = −0·011
Correction for ⊙'s latitude .... = +0·004
Correction of assumed place by autumnal obs. .... = −0·007
———— by vernal obs. .... = −0·119
Mean correction of Greenwich equinox = −0·063

Assumed equinox = Maskelyne's + 0^{s}·20
Hence corrected equinox = Maskelyne's +0^{s}·137
The mean correction by the equinoxes of 1831 = −0^{s}·076
———— of 1832 = −0^{s}·051

* Reflected Observations.

THE LONGITUDE OF THE OBSERVATORY.

The longitude given at page 16, is derived from corresponding observations of the Moon and Moon-culminating Stars, made at the Observatories of Greenwich, Cambridge, Cape of Good Hope, and St. Helena, during the Years 1830, 31, 32, and 33. The Results are shewn in the following Tables :—

Meridian Distance of St. Helena from Greenwich.

Moon's First Limb.		
Date. 1830.	Change of Moon's R.A.	Meridian Distance.
Feb. 3	$+55^{s}{\cdot}01$	$+22^{m}\ 50^{s}{\cdot}3$
March 4	52·56	54·4
May 4	44·05	51·5
1831.		
Jan. 26	58·96	53·1
Mar. 23	54·45	69·9
May 24	45·65	49·8
June 21	46·16	48·6
1832.		
Mar. 13	57·39	51·6
April 11	52·06	50·2
May 8	51·96	46·4
9	50·05	55·7
10	48·19	46·2
13	47·92	52·7
1833.		
Feb. 3	63·82	46·9
March 4	59·92	53·3
5	57·56	57·3
16 obs. of first limb =		+22 52·4

Moon's Second Limb.		
Date. 1832.	Change of Moon's R.A.	Meridian Distance.
July 12	$+50^{s}{\cdot}58$	$+22^{m}\ 74^{s}{\cdot}5$
1833.		
March 5	+57·38	53·2
2 obs. of second limb =		+22 63·8*
16 obs. of first limb =		+22 52·4†
Long. of St. Helena =		+22 58·1

* Mean Diff. = $\pm 10^{s}{\cdot}6$

† Mean Diff. = ± 3·8

Meridian Distance of St. Helena from Cambridge.

Moon's First Limb.

Date. 1831.	Change of Moon's R.A.	Meridian Distance.
	s	m s
March 23	+55·43	+23 34·9
June 21	46·91	10·9
22	48·41	18·0
1832.		
March 13	58·66	21·7
April 11	52·95	14·0
May 8	52·985	13·2
10	49·145	13·0
13	48·59	12·0
1833.		
Feb. 2	65·29	10·7
3	65·34	19·2
March 4	61·36	25·9
11 obs. of first limb =		+23 17·6

Moon's Second Limb.

Date. 1833.	Change of Moon's R.A.	Meridian Distance.
	s	m s
Feb. 4	+62·40	+23 5·2
March 6	+55·72	11·3

2 obs. of second limb =	+23 8·3*
11 obs. of first limb =	+23 17·6†
Mean =	+23 13·0
Long. of Cambridge =	−23·5
Long. of St. Helena =	+22 49·5

* Mean Diff. = ±3·0 s

† Mean Diff. = ±5·8

Meridian Distance of St. Helena from Cape of Good Hope.

Moon's First Limb.		
Date. 1832.	Change of Moon's R.A.	Meridian Distance.
	m s	h m s
April 11	+3 40·88	+1 36 47·5
May 10	3 24·695	37·8
13	3 22·71	48·8
Dec. 2	3 15·67	60·1
3	3 22·68	33·9
4	3 34·46	61·6
5	3 48·26	52·3
6	3 4·265	52·7
1833. Jan. 2	3 51·10	48·4
Feb. 2	4 31·82	31·8
3	4 31·615	53·5
March 3	4 22·265	54·2
4	4 14·08	57·2
5	4 3·485	60·1
31	4 9·43	56·7
April 1	4 1·24	51·9
16 obs. of first limb =		+1 36 50·5

Moon's Second Limb.		
Date. 1833.	Change of Moon's R.A.	Meridian Distance.
	m s	h m s
March 5	+4 3·145	+1 36 52·3
6	+3 52·96	51·1
2 obs. of second limb =		+1 36 51·7*
16 obs. of first limb =		+1 36 50·5†
Mean =		+1 36 51·1
Longitude of Cape =		−1 13 55·0
Long. of St. Helena =		+0 22 56·1

* Mean Diff. = ±0·6 s

† Mean Diff. = ±6·9

Hence we have, for the longitude of St. Helena from Greenwich,

By comparisons with Greenwich .... = +22 m 58·1 s
Cambridge .... = +22 49·5
Cape .... = +22 56·1
Mean .... = +22 54·6 (time).
Or = 5° 43′ 39″ (arc).

The solar eclipse of 27th July, 1832, was observed at St. Helena. It was also observed at the Observatories of St. Fernando, near Cadiz, Marseilles, and Padua. The *mean* time of the beginning and end of this phenomenon,

		h	m	s
At St. Helena	Beginning	= 2	33	5·4[*]
	End	= 3	32	24·8
At St. Fernando	Beginning	= 1	3	31·5
	End	= 3	9	4·8
At Marseilles	Beginning	= 2	23	38·0
	End	= 3	35	35·8
At Padua	Beginning	= 3	11	33·7
	End	= 3	47	10·8

From these *data* I find, by combining the observations of both contacts, the mean time of true conjunction,

	h	m	s			
At St. Helena	1	39	8·6	$+1·009\,x$	$-1·101\,y$	$-0·739\,z$
St. Fernando	1	37	2·5	$-0·064\,x$	$-0·112\,y$	$-0·362\,z$
Marseilles	2	23	19·4	$-0·186\,x$	$-0·220\,y$	$-0·373\,z$
Padua	2	49	11·4	$-0·539\,x$	$-0·565\,y$	$-0·195\,z$

x, y, z, respectively denoting the errors of the assumed distances of the centres of the two luminaries, or the sum of their semidiameters—of the lunar latitude—and of the differences of the horizontal parallaxes of the moon and sun. All these elements were taken from the *Nautical Almanac.*

From the above times of conjunction we have, for the meridian distance of St. Helena, from

	h	m	s			
St. Fernando	= −0	2	6·1	$-1·073\,x$	$+0·989\,y$	$+0·377\,z$
Marseilles	= +0	44	10·8	$-1·195\,x$	$+0·881\,y$	$+0·366\,z$
Padua	= +1	10	2·8	$-1·548\,x$	$+0·536\,y$	$+0·544\,z$

the sign − denoting St. Helena to be *east* of the place with which it is compared, and + *west.*

According to the *Nautical Almanac,* the longitude from Greenwich of

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[*] "The eclipse had commenced about 10 seconds before this time was noted." I have, therefore, in the computations, assumed the commencement to have taken place at $2^{h}\ 32^{m}\ 55^{s}$. I perceive that this time is erroneously recorded in the sixth volume of the *Memoirs* of the Royal Astronomical Society, $2^{h}\ 33^{m}\ 54^{s}$, instead of $2^{h}\ 33^{m}\ 5^{s}{\cdot}4$.

St. Fernando .... $= +24^{m}\ 49^{s}{\cdot}1$
Marseilles .... $= -21\ \ 29{\cdot}0$
Padua .... $= -47\ \ 29{\cdot}2$

Applying these values, therefore, with their proper signs, to the meridian distances above given, we obtain, for the *western* longitude of St. Helena,

By the obs. at St. Fernando........ $= 22^{m}\ 43^{s}{\cdot}0\quad -1{\cdot}073\,x + \&c.$
Marseilles .... $= 22\ \ 41{\cdot}8\quad -1{\cdot}195\,x + \&c.$
Padua .... $= 22\ \ 33{\cdot}6\quad -1{\cdot}548\,x + \&c.$

These values differ considerably from those before given; but as the observation of the commencement of the eclipse is subject to some uncertainty, it will, perhaps, be better not to interfere with the result obtained by moon-culminating stars. For the present, therefore, I assume the longitude of the Observatory, St. Helena,

$22^{h}\ 54^{s}{\cdot}6$ West of Greenwich;

though I think it not improbable that future observations will point out a diminution of two or three seconds to be necessary.

As the geographical position of the harbour of St. Helena is of importance—it being much resorted to by ships trading to the eastward, and many of them arrive after a long voyage, in the course of which they have few opportunities of correcting their chronometers—it may not be amiss here to mention, that the meridian of the Observatory passes over one of the most frequented parts of the anchorage; and as the whole extent of the latter does not exceed, at most, ¾ of a mile, we may safely assign to it the same longitude as the Observatory.

With regard to latitude, I estimate the Observatory to be about half a mile *south* of the harbour. The latitude of the Observatory is 15° 55′ 26″ *South*. The latitude of the harbour, therefore, as usually given in books of navigation, viz. 15° 55′ 0″, is, I believe, within a few seconds of the truth.

CATALOGUE

OF

606 PRINCIPAL STARS

IN THE

SOUTHERN HEMISPHERE.

NOTE.—An asterisk after the Number refers to the Notes. An asterisk after the Annual Variation denotes that the Star has *a proper motion*, which is included, in this column, with the Annual Precession.

In the column of Differences from the Astronomical Society, where the letter "*f*" occurs, it shews that the Star was observed by Mr. FALLOWS, but omitted in the Astronomical Society's Catalogue; and the differences were obtained by comparison with Mr. FALLOWS's Catalogue in the *Philosophical Transactions*, 1824, Part II., p. 457.

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
1	Phœnicis ε	4	0^{h} 0^{m} 45^{s}·64	+ 3^{s}·063	5	− 46° 41′ 7″·7	+ 20″·04	5	1938
2	Octantis	5	0 2 8·79	+ 2·967	9	− 83 10 11·3	+ 20·04	7	1940 γ^{3}
3	8 Ceti ι	4	0 10 46·02	+ 3·057	16	− 9 46 2·8	+ 20·02	20	
4*	Toucan	5	0 11 9·78	+ 2·923	7	− 65 52 24·2	+ 20·02	7	11 ζ
5	Octantis	6·7	0 15 —	+ 4·114	..	− 89 18 32·0	+ 20·00	9	
6*	Hydri β	3	0 16 42·93	+ 2·606	18	− 78 12 44·4	+ 19·99	11	15
7	Phœnicis	5	0 17 49·36	+ 2·966	3	− 44 37 26·6	+ 19·98	8	16 κ
8*	Phœnicis α	2	0 17 51·83	+ 2·970	7	− 43 13 48·8	+ 19·98	10	17
9	Phœnicis	5	0 23 11·63	+ 2·909	3	− 49 44 39·7	+ 19·94	11	25 λ^{1}
10	Toucan	4·5	0 23 42·74	+ 2·786	12	− 63 53 45·6	+ 19·94	6	26 β^{1}
11	Toucan	5	0 23 43·47	+ 2·786	7	− 63 54 13·0	+ 19·94	5	27 β^{2}
12	Toucan	5	0 24 56·59	+ 2·771	7	− 63 58 8·9	+ 19·92	6	28 β^{3}
13	Phœnicis	5	0 33 16·45	+ 2·861	3	− 47 1 8·6	+ 19·83	6	41 μ
14	16 Ceti β	2·3	0 35 3·32	+ 2·998	8	− 18 55 16·1	+ 19·81	23	
15	17 Ceti ϕ^{1}	5	0 35 36·83	+ 3·026	6	− 11 32 13·3	+ 19·80	7	
16*	Phœnicis	5	0 35 41·12	+ 2·731	7	− 58 23 46·1	+ 19·80	7	47 η
17	20 Ceti	5	0 44 19·51	+ 3·059	12	− 2 4 9·1	+ 19·67	19	
18	App. Sculp.	5	0 50 24·60	+ 2·898	16	− 30 16 39·5	+ 19·56	28	61 α
19	Phœnicis β	3·4	0 58 29·15	+ 2·698	12	− 47 37 51·4	+ 19·39	17	68
20	31 Ceti η	3·4	1 0 2·39	+ 3·000	11	− 11 5 9·8	+ 19·36	19	
21	Phœnicis	5	1 1 13·43	+ 2·542	6	− 56 9 23·0	+ 19·33	8	71 ζ
22	45 Ceti θ	3	1 15 31·64	+ 2·999	10	− 9 3 49·0	+ 18·96	30	
23	Phœnicis	5	1 17 8·76	+ 2·665	4	− 42 22 47·6	+ 18·92	5	86
24	46 Ceti	5	1 17 15·65	+ 2·946	9	− 15 29 9·8	+ 18·92	11	
25*	Phœnicis γ	3·4	1 20 58·53	+ 2·619	17	− 44 11 30·4	+ 18·81	12	89
26*	Phœnicis δ	4	1 24 9·95	+ 2·497	23	− 49 57 29·4	+ 18·71	8	91
27	Eridani α	1	1 31 22·53	+ 2·235	60	− 58 6 9·9	+ 18·47	52	102
28	5[illegible] Ceti τ	3·4	1 36 10·35	+ 2·779*	8	− 16 50 7·4	+ 19·14*	20	
29	App. Sculp.	5	1 37 40·90	+ 2·800	9	− 25 54 17·4	+ 18·25	5	113 ε
30	53 Ceti χ	5	1 41 14·32	+ 2·952	15	− 11 31 51·7	+ 18·12	8	
31	55 Ceti ζ	3	1 43 4·36	+ 2·953	11	− 11 10 43·8	+ 18·05	19	
32	Phœnicis	5	1 47 18·50	+ 2·499	3	− 43 20 1·9	+ 17·89	5	124 φ
33*	Eridani	4	1 49 20·36	+ 2·270	8	− 52 27 27·9	+ 17·81	8	127 χ
34	Hydri	4·5	1 50 38·26	+ 1·495	10	− 68 29 8·3	+ 17·75	8	132 η^{2}
35	59 Ceti υ	4·5	1 51 59·76	+ 2·816	10	− 21 54 16·8	+ 17·70	16	

Nº	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
1	....	− 0̇·34	+ 0̇·05	....	− 0̇·26	....″	− 4″·7	+ 3″·3	....″	+ 2″·0
2	....	+ 0·28	....	....	− 4·71	....	− 0·6	....	....	+ 1·6
3	....	....	− 0·03	− 0·03	− 0·38	....	....	− 0·7	+ 2·8	+ 5·7
4*	−20·95	....	....	....	− 2·80	− 95·9	....	− 1·4	....	−123·6
5	....	....	....	....	....	....	....	....	....	....
6*	−57·38	− 3·79	....	....	−10·17	− 23·1	+ 0·1	....	....	+ 3·4
7	....	....	+ 0·31	....	− 1·00	....	....	− 0·1	....	+ 6·3
8*	− 1·33	....	+ 0·09	....	− 0·56	+ 36·4	....	+ 3·8	....	+ 12·6
9	− 0·28	− 0·44	+ 0·19	....	− 0·77	− 2·4	....	− 0·7	....	− 53·4
10	+ 0·62	− 1·19	+ 0·04	....	+ 0·10	+ 3·1	− 4·1	....	....	− 12·8
11	+ 0·41	− 1·13	....	....	− 0·27	+ 3·7	+ 0·8	....	....	− 7·4
12	....	− 0·52	....	....	+ 0·31	....	....	+ 6·2	....	+ 1·5
13	....	− 0·45	+ 0·13	....	+ 0·11	....	+ 1·5	+ 0·3	....	+ 10·6
14	....	....	− 0·14	+ 0·02	− 0·09	....	....	+ 3·3	+ 3·2	+ 1·3
15	....	....	− 0·07	+ 0·22	− 0·25	....	....	+ 3·3	+ 2·1	+ 0·1
16*	+ 1·10	+ 0·16	+ 0·28	....	− 0·78	+ 42·3	+ 0·2	+ 3·1	....	+ 3·0
17	....	....	+ 0·01	+ 0·03	+ 0·09	....	....	+ 0·8	+ 1·4	+ 0·9
18	....	+ 0·23	− 0·09	+ 0·27	− 0·04	....	+ 0·5	− 2·3	+ 2·5	+ 0·2
19	+ 0·15	+ 0·75	+ 0·11	....	− 0·05	+ 4·9	+ 5·2	+ 0·7	....	+ 9·8
20	....	....	....	+ 0·06	+ 0·24	....	....	+ 3·7	+ 2·4	+ 6·0
21	....	− 0·65	....	....	− 0·43	....	....	....	....	+ 13·0
22	....	....	....	+ 0·16	− 0·09	....	....	+ 3·5	+ 3·4	+ 3·8
23	....	....	....	....	+ 0·20	....	....	+ 4·0	....	+ 0·7
24	....	....	+ 0·08	+ 0·17	− 0·14	....	....	− 0·7	+ 3·5	+ 5·3
25*	+ 0·09	− 0·51	+ 0·09	....	− 0·57	+ 20·9	+ 2·2	+ 2·9	....	+ 6·9
26*	− 1·23	− 0·62	+ 0·05	....	− 0·25	− 9·6	+ 1·0	− 4·2	....	+ 11·7
27	− 0·42	− 0·32	+ 0·20	....	− 0·49	+ 1·5	+ 2·0	+ 2·4	....	− 2·2
28	....	....	+ 0·07	+ 0·10	− 0·27	....	....	+ 1·9	+ 2·1	+ 4·3
29	....	....	+ 0·28	+ 0·37	− 0·49	....	....	+ 0·4	+ 1·2	− 0·3
30	....	....	+ 0·08	+ 0·21	− 0·82	....	....	+ 1·9	+ 3·0	+ 1·6
31	....	....	− 0·01	+ 0·15	− 0·45	....	....	+ 3·6	+ 2·8	− 1·8
32	....	....	+ 0·27	....	+ 0·27	....	+ 3·8	+ 4·4	....	+ 0·2
33*	+ 4·84	....	+ 0·22	....	− 1·04	− 25·2	....	+ 4·5	....	− 6·2
34	....	....	....	....	− 0·52	....	....	+ 4·1	....	− 1·9
35	....	....	+ 0·10	+ 0·00	− 0·40	....	....	+ 0·4	+ 1·2	+ 3·3

Nº	Stars.		Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.	
36*	Hydri	α	3·4	1h 53m 25s·03	+1s·854	7	−62° 23′ 57″·1	+17″·64	12	136	
37	Phœnicis		5	1 54 53·15	+2·414	1	−45 32 6·2	+17·58	6	137	χ
38	Eridani		4	2 10 26·44	+2·136	6	−52 18 6·5	+16·88	9	154	φ
39	68 Ceti	ο	Var.	2 10 45·85	+3·021	9	− 3 45 15·2	+16·87	19		
40	72 Ceti	ρ	5	2 17 44·50	+2·893	21	−13 3 42·2	+16·53	25		
41	Hydri	δ	4	2 18 45·17	+1·041	8	−69 26 6·0	+16·48	5	166	
42	Eridani		4·5	2 20 45·19	+2·199	4	−48 28 11·3	+16·38	10	168	κ
43	76 Ceti	σ	5	2 24 2·03	+2·843	18	−15 59 43·2	+16·21	19		
44	82 Ceti	δ	4	2 30 46·92	+3·062	12	− 0 24 35·1	+15·86	27		
45	83 Ceti	ε	4·5	2 31 20·79	+2·885	8	−12 35 55·5	+15·83	17		
46	Eridani		5	2 33 19·12	+2·278	4	−43 37 30·9	+15·72	5	184	S
47	Eridani		4	2 33 57·60	+2·356	5	−40 35 12·2	+15·69	14	185	ι
48	89 Ceti	π	4	2 36 2·17	+2·849	14	−14 35 1·6	+15·57	29		
49	Hydri		5	2 37 0·33	+0·868	9	−68 59 49·7	+15·53	8	196	ι
50	Fornacis		5	2 41 58·45	+2·502	11	−33 7 25·8	+15·24	10	204	β
51	Hydri		5	2 42 57·29	+0·874	10	−68 19 58·7	+15·19	7	214	ζ
52	2 Eridani	τ²	4·5	2 43 19·70	+2·720	12	−21 42 32·1	+15·17	18		
53	3 Eridani	η	3	2 48 7·70	+2·917	16	− 9 34 47·0	+14·89	24		
54	Eridani		4·5	2 51 49·01	+2·277	3	−40 59 23·9	+14·67	7	225	θ¹
55	9 Eridani	ρ²	5	2 54 21·91	+2·933	2	− 8 21 34·2	+14·52	9		
56	11 Eridani	τ³	4	2 54 53·83	+2·651	5	−24 17 44·0	+14·48	7		
57	10 Eridani	ρ³	5	2 55 55·89	+2·933	6	− 8 16 16·9	+14·42	8		
58	Hydri		5	3 1 58·22	+0·037	14	−72 34 0·1	+14·05	7	240	θ¹
59	12 Eridani		3·4	3 4 51·24	+2·561*	19	−29 39 41·9	+14·69*	51		
60	13 Eridani		4	3 7 34·92	+2·906	8	− 9 27 23·6	+13·70	9		
61	16 Eridani	τ⁴	3·4	3 11 57·48	+2·659	7	−22 22 53·5	+13·41	10		
62	Eridani		4·5	3 13 9·05	+2·114	4	−43 43 28·3	+13·35	8	253	e
63	17 Eridani		4·5	3 22 11·33	+2·966	13	− 5 39 51·1	+12·74	10		
64	18 Eridani	ε	4	3 24 55·48	+2·884	14	−10 2 21·5	+12·55	15		
65	19 Eridani	τ⁵	4	3 26 16·94	+2·641	9	−22 12 28·3	+12·46	8		
66	10 Tauri		5	3 28 12·25	+3·065	7	− 0 8 38·8	+12·33	10		
67	Eridani		5	3 30 59·95	+2·149	5	−40 50 12·5	+12·13	9	273	y
68	23 Eridani	δ	3·4	3 35 6·62	+2·871	20	−10 20 41·3	+12·44*	28		
69	Fornacis		5	3 35 29·45	+2·381	4	−32 29 9·3	+11·82	5	279	δ
70	Eridani		5	3 36 32·16	+2·227	3	−37 51 16·2	+11·74	7	282	h

Nº	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C—J	Rumker. R—J	Taylor. T—J	Pond. P—J	Ast. Soc. A.S.—J	La Caille. C—J	Rumker. R—J	Taylor. T—J	Pond. P—J	Ast. Soc. A.S.—J
36*	− 3·00	+ 0·02	....	....	+ 0·13	− 1″·6	− 1″·4	+ 1″·9	....″	+ 12″·0
37	....	....	+ 0·01	....	+ 0·36	....	....	+ 1·6	....	− 8·9
38	....	− 0·66	− 0·17	....	− 0·60	....	+ 6·4	− 0·5	....	− 1·1
39	....	....	....	− 0·09	....	....	....	....	....	+ 6·3
40	....	....	+ 0·05	+ 0·12	− 0·16	....	....	+ 5·2	+ 2·8	+ 6·3
41	+ 0·88	− 0·16	....	....	− 1·23	+ 1·1	+ 1·7	− 2·4	....	− 3·1
42	....	− 0·66	+ 0·04	....	− 1·99	....	+ 2·1	+ 1·8	....	− 5·3
43	....	....	+ 0·10	+ 0·12	− 0·18	....	....	+ 1·4	+ 2·2	+ 9·0
44	....	....	− 0·23	+ 0·26	− 0·27	....	....	− 1·5	+ 2·2	− 0·1
45	....	....	− 0·09	+ 0·23	− 0·15	....	....	+ 3·8	+ 2·2	+ 4·4
46	....	....	....	....	+ 0·10	....	....	+ 5·6	....	+ 3·5
47	....	....	....	....	− 0·74	....	+ 7·4	− 0·1	....	+ 2·3
48	....	....	− 0·01	− 0·12	− 0·41	....	....	− 0·2	+ 4·3	+ 13·1
49	....	....	....	....	− 1·41	....	....	....	....	+ 28·7
50	....	....	....	....	− 0·09	....	....	+ 3·2	....	− 6·8
51	....	− 0·41	....	....	− 0·41	....	+ 5·6	+ 2·1	....	+ 12·8
52	....	....	....	+ 0·15	− 0·12	....	....	− 1·0	+ 1·2	+ 5·1
53	....	....	− 0·09	− 0·30	+ 0·08	....	....	− 2·3	+ 1·1	+ 6·5
54	+ 0·70	− 0·22	....	....	+ 0·30	+ 0·5	+ 18·4	+ 1·4	....	+ 0·5
55	....	....	− 0·04	− 0·13	− 0·18	....	....	+ 3·6	+ 2·0	+ 0·6
56	....	....	....	+ 0·18	+ 0·02	....	....	....	+ 1·6	+ 5·0
57	....	....	....	− 0·16	− 0·33	....	....	....	+ 2·6	+ 3·2
58	....	....	....	....	− 0·84	....	....	....	....	+ 12·4
59	....	....	− 0·16	+ 0·02	+ 0·23	....	....	− 3·2	+ 0·5	+ 4·2
60	....	....	− 0·07	− 0·04	− 0·25	....	....	− 1·8	+ 1·0	+ 3·0
61	....	....	....	+ 0·17	− 0·29	....	....	+ 2·6	+ 0·5	− 0·9
62	....	....	− 0·08	....	− 8·73	....	....	+ 4·4	....	− 24·3
63	....	....	− 0·04	+ 0·07	− 0·08	....	....	− 0·3	− 1·5	+ 2·6
64	....	....	....	+ 0·20	− 0·03	....	....	− 2·5	− 2·2	+ 0·8
65	....	....	− 0·06	+ 0·03	− 0·25	....	....	− 1·7	+ 0·2	+ 0·3
66	....	....	+ 0·14	+ 0·15	+ 0·04	....	....	− 1·8	+ 2·0	+ 6·0
67	....	....	− 0·11	....	− 0·04	....	....	− 0·6	....	+ 0·6
68	....	....	....	− 0·01	+ 0·09	....	....	+ 0·5	+ 5·1	+ 5·6
69	....	....	....	....	+ 0·16	....	....	+ 1·1	....	+ 1·6
70	....	....	....	....	− 0·68	....	....	....	....	+ 0·9

N°	Stars.		Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	N° of Obs.	Mean Declination, 1830.	Annual Variation.	N° of Obs.	La Caille's N° and Letter.	
				h m s	s		° ′ ″	″			
71	26 Eridani	π	5	3 38 6·62	+2·824	6	−12 38 27·3	+11·63	6		
72	27 Eridani	τ^6	5	3 39 32·23	+2·587	7	−23 45 24·6	+10·94*	6		
73	28 Eridani	τ^7	5	3 40 21·19	+2·571	8	−24 24 22·5	+11·47	7		
74*	Reticuli	β	4	3 42 5·93	+0·668	14	−65 20 35·4	+11·35	5	292	
75	Eridani		5	3 42 19·66	+2·202	3	−38 8 39·7	+11·33	8	290	*f*
76	Eridani		5	3 43 5·78	+2·244	3	−36 43 11·9	+11·27	5	291	*g*
77	32 Eridani		5	3 45 45·63	+3·001	13	− 3 27 49·8	+11·08	12		
78	Eridani		5	3 47 10·45	+2·279	3	−35 14 21·9	+10·98	6	295	*i*
79	Hydri	γ	3	3 49 58·69	−1·068	39	−74 45 30·2	+10·77	21	309	
80	34 Eridani	γ	2·3	3 50 6·09	+2·787	7	−13 59 54·6	+10·76	23		
81	36 Eridani	τ^9	5	3 52 40·82	+2·551	3	−24 30 12·7	+10·57	6		
82	35 Eridani		5	3 52 55·57	+3·028	6	− 2 1 57·2	+10·55	8		
83	Reticuli		5	3 56 4·48	+0·927	7	−61 52 55·1	+10·32	5	313	δ
84	Reticuli		5	3 58 27·68	+0·842	11	−62 38 6·2	+10·14	5	317	γ
85	38 Eridani	o	4·5	4 3 34·39	+2·919	14	− 7 17 14·5	+ 9·75	21		
86	39 Eridani	A	5	4 6 18·72	+2·846	11	−10 41 5·7	+ 9·54	12		
87	40 Eridani	*d*	5	4 7 27·01	+2·757*	5	− 7 55 25·0	+ 5·85*	8		
88	Horologii		5	4 8 22·42	+1·978	8	−42 43 4·5	+ 9·38	7	323	α
89	41 Eridani	υ^4	3·4	4 11 27·99	+2·260	6	−34 13 5·5	+ 9·14	11		
90	Doradûs	γ	4	4 11 34·95	+1·549	8	−51 55 6·4	+ 9·13	5	327	
91	Reticuli	α	3·4	4 12 15·45	+0·742	20	−62 54 4·6	+ 9·08	5	329	
92	Reticuli		5	4 13 33·91	+1·022	8	−59 42 47·5	+ 8·98	10	331	ϵ
93	Reticuli		6	4 15 47·46	+0·644	7	−63 40 7·3	+ 8·81	5	336	θ
94	43 Eridani	υ^5	5	4 17 39·46	+2·243	6	−34 24 59·1	+ 8·66	11		
95	Reticuli		5	4 20 4·51	+0·609	7	−63 47 26·7	+ 8·47	5	340	η
96	Cœl. Sculp.		5	4 25 38·10	+1·830	3	−45 19 19·8	+ 8·02	6	348	δ
97	47 Eridani		5	4 26 0·72	+2·883	4	− 8 35 38·5	+ 7·99	7		
98	48 Eridani	ν	4	4 27 50·00	+2·988	3	− 3 42 25·4	+ 7·84	8		
99	52 Eridani	υ^7	3	4 28 56·75	+2·329	7	−30 54 55·8	+ 7·76	7		
100	Doradûs	α	3	4 30 20·00	+1·277	10	−55 23 57·2	+ 7·64	8	356	
101	53 Eridani		4	4 30 23·98	+2·745	4	−14 38 33·6	+ 7·64	7		
102	54 Eridani		4	4 33 0·59	+2·616	11	−20 0 12·9	+ 7·43	11		
103	Cœl. Sculp.		5	4 35 5·40	+1·938	10	−42 11 32·9	+ 7·26	10	360	α
104	Cœl. Sculp.		5	4 36 3·24	+2·111	6	−37 28 51·5	+ 7·18	8	361	β
105	57 Eridani	μ	5	4 37 0·42	+2·990	12	− 3 34 24·6	+ 7·10	22		

Nº	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	″	″	″	″	″
71	....	....	....	+ 0·14	− 0·10	....	....	+ 4·3	+ 3·3	+ 3·1
72	....	....	+ 0·03	− 0·08	− 0·09	....	....	+ 2·9	+ 0·5	− 0·8
73	....	....	....	− 0·11	+ 0·63	....	....	− 1·6	+ 0·1	+ 2·4
74*	− 2·43	....	....	....	− 0·71	− 12·0	....	....	....	− 7·5
75	− 0·44	....	....	....	− 0·35	+ 0·5	....	....	....	+ 3·8
76	....	....	− 0·32	....	+ 0·23	....	....	+ 3·5	....	+ 4·3
77	....	....	....	+ 0·10	+ 0·02	....	....	+ 4·0	+ 2·8	+ 3·3
78	....	....	− 0·19	....	+ 0·02	....	....	− 4·1	....	+ 0·5
79	− 0·21	− 0·63	....	....	− 1·05	− 6·4	+ 1·9	....	....	− 3·2
80	....	....	....	+ 0·03	− 0·13	....	....	+ 4·1	+ 4·0	+ 4·7
81	....	....	+ 0·16	+ 0·03	− 0·24	....	....	+ 0·5	+ 0·3	+ 4·3
82	....	....	....	− 0·03	− 0·05	....	....	+ 0·1	+ 1·0	+ 0·9
83	....	....	....	....	− 0·46	....	....	− 0·3	....	+ 16·1
84	....	....	+ 0·05	....	− 2·04	....	....	− 1·3	....	+ 2·1
85	....	....	− 0·07	− 0·05	− 0·63	....	....	+ 1·0	+ 1·7	+ 2·2
86	....	....	....	+ 0·07	− 0·14	....	....	0·0	+ 1·4	+ 4·6
87	....	....	....	− 0·12	− 0·14	....	....	+ 5·8	+ 2·7	+ 6·6
88	....	....	− 0·06	....	− 0·40	....	....	+ 4·5	....	+ 7·6
89	....	....	− 0·13	+ 0·22	− 0·88	....	....	+ 0·3	− 11·6	+ 0·6
90	....	....	....	....	+ 0·95	....	....	− 1·8	....	+ 22·0
91	− 0·73	....	....	....	− 0·43	+ 1·2	....	+ 2·7	....	+ 18·1
92	....	....	....	....	− 0·13	....	....	− 1·1	....	− 0·6
93	....	....	....	....	− 1·86	....	....	+ 1·7	....	+ 2·2
94	....	....	....	....	− 0·40	....	....	− 2·1	− 12·9	− 0·4
95	....	....	....	....	− 0·25	....	....	+ 2·6	....	+ 0·5
96	+ 0·51	....	− 0·37	....	− 0·43	− 0·1	....	− 4·0	....	− 6·4
97	....	....	− 0·11	− 0·01	− 0·25	....	....	+ 6·9	+ 2·7	+ 4·1
98	....	....	....	− 0·22	− 0·49	....	....	....	+ 2·2	+ 3·1
99	....	....	....	+ 0·04	+ 0·01	....	....	− 0·7	− 1·1	− 1·1
100	− 0·70	....	....	....	− 0·52	− 0·9	....	− 4·7	....	+ 8·2
101	....	....	....	+ 0·06	− 0·31	....	....	+ 0·1	+ 2·4	+ 6·1
102	....	....	− 0·01	+ 0·08	− 0·22	....	....	− 4·0	+ 0·3	+ 3·6
103	....	....	− 0·19	....	+ 0·26	....	....	− 1·2	....	+ 1·8
104	....	....	− 0·09	....	− 0·47	....	....	+ 2·5	....	− 6·3
105	....	....	+ 0·26	+ 0·09	− 0·35	....	....	+ 6·4	+ 2·8	+ 5·9

Nº	Stars.		Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
106	61 Eridani	ω	5	$4^{h}\ 44^{m}\ 32^{s}\!\cdot\!80$	$+2^{s}\!\cdot\!941$	21	$-\ 5^{\circ}\ 44'\ 38''\!\cdot\!8$	$+6''\!\cdot\!48$	32	
107	63 Eridani		5	4 51 47·95	+2·831	11	−10 31 9·3	+5·88	12	
108	65 Eridani	ψ	5	4 53 12·03	+2·901	11	− 7 25 49·7	+5·76	17	
109	2 Leporis	ε	4	4 58 16·06	+2·532	11	−22 36 18·7	+5·34	17	
110	Cœl. Sculp.		5	4 58 17·83	+2·141	6	−35 43 13·1	+5·33	8	385 γ^1
111	67 Eridani	β	3	4 59 29·79	+2·948	18	− 5 18 47·5	+5·23	17	
112	69 Eridani	λ	4	5 1 0·89	+2·864	4	− 8 58 44·3	+5·10	8	
113	3 Leporis	ι	4·5	5 4 22·28	+2·791	3	−12 4 48·2	+4·82	6	
114	5 Leporis	μ	5	5 5 —	+2·686	..	−16 24 47·3	+4·74	6	
115	4 Leporis	κ	5	5 5 —	+2·765	..	−13 8 56·7	+4·73	5	
116	19 Orionis	β	1	5 6 22·36	+2·876	102	− 8 24 18·2	+4·65	102	
117	20 Orionis	τ	4	5 9 21·32	+2·907	3	− 7 2 6·7	+4·39	5	
118	6 Leporis	λ	4·5	5 11 44·90	+2·758	10	−13 21 32·4	+4·19	9	
119	28 Orionis	η	4·5	5 15 56·01	+3·009	9	− 2 33 40·1	+3·83	13	
120	9 Leporis	β	4	5 20 57·86	+2·565	7	−20 54 1·4	+3·40	6	
121	31 Orionis		5	5 21 6·25	+3·040	4	− 1 14 0·4	+3·39	7	
122	34 Orionis	δ	2	5 23 19·51	+3·058	32	− 0 25 57·4	+3·19	46	
123	36 Orionis	υ	5	5 23 42·66	+2·896	3	− 7 26 3·5	+3·16	6	
124*	Columbæ	ε	4	5 25 10·84	+2·122	5	−35 35 59·4	+3·03	6	419
125	11 Leporis	α	3·4	5 25 14·23	+2·640	3	−17 57 1·1	+3·03	7	
126	42 Orionis	c	5	5 27 0·26	+2·953	3	− 4 57 26·3	+2·88	6	
127	44 Orionis	ι	3·4	5 27 7·19	+2·928	8	− 6 1 43·1	+2·87	5	
128	46 Orionis	ε	2·3	5 27 35·44	+3·038	24	− 1 19 4·5	+2·83	7	
129	48 Orionis	σ	4	5 30 12·91	+3·005	4	− 2 42 21·9	+2·60	8	
130	49 Orionis	d	5	5 30 39·80	+2·898	3	− 7 18 54·0	+2·56	8	
131	Doradûs	β	4	5 32 9·61	+0·510	7	−62 36 6·6	+2·43	6	436
132	50 Orionis	ζ	3	5 32 11·07	+3·021	32	− 2 2 24·1	+2·43	46	
133	Columbæ	α	2·3	5 33 29·83	+2·167	34	−34 10 10·4	+2·31	30	434
134	13 Leporis	γ	4	5 37 22·69	+2·517	9	−22 30 34·9	+1·98	9	
135	14 Leporis	ζ	4·5	5 39 15·39	+2·714	6	−14 53 31·4	+1·81	5	
136	Columbæ		5·6	5 39 41·06	+2·224	7	−32 22 34·3	+1·78	5	444 μ
137	53 Orionis	κ	3	5 39 41·77	+2·840	9	− 9 44 13·5	+1·77	8	
138	15 Leporis	δ	5	5 44 0·70	+2·559	8	−20 53 58·1	+0·78*	6	
139	Doradûs		5	5 44 28·72	+0·102	6	−65 47 56·6	+1·36	6	455 δ
140*	Columbæ	β	3	5 44 58·35	+2·106	5	−35 50 11·7	+1·31	8	

Nº	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
106	″ ····	″ ····	″ ····	+ 0″·01	− 0″·18	″ ····	″ ····	− 1″·5	+ 3″·6	+ 6″·0
107	····	····	····	− 0·09	+ 0·14	····	····	+ 2·3	+ 3·5	+ 3·2
108	····	····	− 0·02	+ 0·04	− 0·22	····	····	+ 4·0	+ 3·8	+ 4·7
109	····	····	+ 0·02	+ 0·14	− 0·72	····	····	+ 2·1	+ 0·1	+ 5·7
110	····	····	····	····	− 0·39	····	····	− 2·5	····	+ 1·2
111	····	····	0·00	+ 0·01	− 0·11	····	····	− 1·7	+ 2·2	+ 3·1
112	····	····	····	+ 0·04	− 0·21	····	····	+ 1·8	+ 2·7	+ 2·2
113	····	····	····	− 0·02	− 0·36	····	····	+ 0·3	+ 0·9	+ 5·0
114	····	····	····	····	····	····	····	+ 2·1	+ 3·4	+ 3·3
115	····	····	····	····	····	····	····	····	+ 2·3	+ 1·7
116	····	····	− 0·04	− 0·05	− 0·23	····	····	+ 3·8	+ 2·6	+ 3·5
117	····	····	− 0·04	+ 0·06	+ 0·08	····	····	+ 2·3	+ 1·0	+ 1·8
118	····	····	− 0·26	− 0·09	− 0·52	····	····	+ 2·3	+ 2·5	+ 3·0
119	····	····	− 0·03	− 0·01	− 0·17	····	····	+ 4·0	+ 2·4	+ 2·5
120	····	····	− 0·02	0·00	− 0·03	····	····	− 3·8	+ 0·3	+ 0·6
121	····	····	− 0·07	− 0·10	− 0·90	····	····	+ 0·2	+ 0·4	+ 2·7
122	····	····	− 0·09	+ 0·06	− 0·08	····	····	− 1·7	+ 2·5	+ 1·1
123	····	····	····	− 0·03	+ 0·40	····	····	+ 3·7	+ 2·7	+ 1·7
124*	····	····	····	+ 0·01	− 0·28	····	····	− 2·7	−18·4	+ 2·8
125	····	····	····	− 0·09	− 0·30	····	····	+ 1·7	+ 1·7	+ 0·8
126	····	····	− 0·06	− 0·03	+ 0·64	····	····	− 3·9	+ 3·4	+ 4·1
127	····	····	····	+ 0·19	+ 0·43	····	····	+ 4·1	+ 1·7	+ 7·5
128	····	····	····	+ 0·02	− 0·17	····	····	+ 1·4	+ 2·3	+ 1·8
129	····	····	− 0·05	+ 0·11	− 0·35	····	····	+ 5·6	+ 3·5	+ 7·6
130	····	····	····	− 0·06	+ 0·08	····	····	+ 1·8	+13·2	+ 4·6
131	+ 0·44	····	····	····	− 0·45	− 5·2	····	− 0·8	····	+ 1·2
132	····	····	− 0·19	0·00	+ 0·01	····	····	+ 4·3	+ 3·0	+ 2·6
133	+ 0·29	− 0·20	− 0·03	0·00	− 0·35	+ 4·2	− 1·3	+ 0·7	− 9·3	+ 0·2
134	····	····	− 0·01	+ 0·05	− 0·40	····	····	+ 1·7	+ 2·6	+ 0·4
135	····	····	− 0·12	+ 0·02	− 0·58	····	····	− 1·6	+ 3·0	+ 4·3
136	····	····	····	− 0·11	− 0·27	····	····	− 0·4	− 5·3	+ 1·5
137	····	····	····	+ 0·06	− 0·25	····	····	− 1·3	+ 2·1	+ 5·7
138	····	····	+ 0·07	+ 0·10	− 0·15	····	····	− 0·1	+ 1·1	+ 0·5
139	····	····	····	····	− 0·76	····	····	− 3·5	····	− 0·2
140*	+ 0·04	− 0·20	+ 0·05	− 0·21	− 0·23	−32·7	····	+ 3·1	−19·8	−11·5

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
			h m s	s		° ′ ″	″		
141	16 Leporis η	4	5 48 39·88	+2·730	4	−14 12 20·4	+0·99	10	
142	Doradûs	5	5 50 4·72	−0·069	5	−66 56 33·9	+0·87	6	468 ι
143	Columbæ γ	4	5 51 30·86	+2·122	7	−35 18 23·2	+0·74	8	465
144	Columbæ	5	5 53 56·80	+1·830	8	−42 49 43·1	+0·53	7	471 η
145	18 Leporis θ	4·5	5 58 27·77	+2·712	16	−14 55 36·5	+0·13	31	
146	Columbæ	5	6 1 42·12	+2·053	5	−37 14 1·5	−0·15	8	485 θ
147	5 Monoceris	4·5	6 6 33·94	+2·922	21	− 6 13 47·3	−0·57	28	
148	Columbæ	5	6 10 30·37	+2·130	7	−35 5 18·7	−0·92	7	497 κ
149	1 Can. Maj. ζ	3	6 13 47·41	+2·298	17	−29 59 34·7	−1·21	36	
150	2 Can. Maj. β	2·3	6 15 12·83	+2·638	25	−17 52 41·4	−1·33	45	
151	3 Can. Maj.	4	6 15 54·24	+2·191	5	−33 21 19·5	−1·39	6	
152*	Argûs α	1	6 20 10·90	+1·327	95	−52 36 20·7	−1·76	87	519
153*	Can. Maj.	4·5	6 21 52·20	+2·222	5	−32 28 40·3	−1·91	5	
154	5 Can. Maj. ξ^2	5	6 27 56·00	+2·510	18	−22 50 8·7	−2·44	17	
155	7 Can. Maj. ν^2	5	6 29 16·13	+2·609	9	−19 7 1·1	−2·55	18	
156	Argûs	3	6 32 33·76	+1·832	24	−43 3 3·7	−2·84	20	557 ν
157	9 Can. Maj. α	1	6 37 39·41	+2·643*	117	−16 29 23·5	−4·42*	171	
158	13 Can. Maj. κ^2	4	6 43 29·57	+2·237	7	−32 19 1·5	−3·78	7	
159	Argûs	4	6 45 43·17	+1·484	5	−50 24 54·0	−3·97	6	579 τ
160	14 Can. Maj. θ	5	6 46 17·45	+2·794	5	−11 49 57·2	−4·02	10	
161*	Eq. Pict. α	4	6 46 26·65	+0·629	30	−61 45 34·3	−4·03	11	583
162	16 Can. Maj. o^1	4	6 47 4·79	+2·486	10	−23 58 36·9	−4·09	14	
163	20 Can. Maj. ι	4·5	6 48 33·34	+2·673	15	−16 50 25·4	−4·21	9	
164	21 Can. Maj. ε	2·3	6 51 56·83	+2·354	24	−28 44 45·4	−4·50	47	
165	22 Can. Maj.	3·4	6 54 56·99	+2·387	11	−27 41 47·2	−4·76	38	
166	24 Can. Maj. o^2	4	6 55 55·61	+2·502	12	−23 35 24·9	−4·84	7	
167	23 Can. Maj. γ	4	6 56 4·04	+2·711	8	−15 23 19·2	−4·85	14	
168	25 Can. Maj. δ	3·4	7 1 28·87	+2·436	28	−26 7 43·3	−5·31	37	
169	Argûs	5	7 3 8·71	+2·012	8	−39 23 12·6	−5·46	7	607 A in P
170	22 Monocer.	4·5	7 3 10·93	+3·063	6	− 0 13 7·0	−5·46	13	
171	27 Can. Maj.	4·5	7 7 19·56	+2·443	10	−26 3 54·1	−5·80	17	
172	Argûs	5	7 7 42·88	+1·722	12	−46 28 43·8	−5·84	7	615 l in P
173	Argûs	5	7 8 8·20	+1·795	6	−44 53 27·6	−5·87	7	616 L^1 in P
174	Pis. Vol.	5	7 10 9·68	−0·475	25	−70 13 16·7	−6·04	5	
175	Argûs	3	7 11 8·44	+2·116	15	−36 47 48·4	−6·12	36	627 π

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	s	s	s	s	s
141	....	....	+ 0·22	+ 0·05	−0·28	....	....	+ 4·9	+ 4·2	+ 8·2
142	....	....	....	....	−1·84	....	....	− 5·6	....	−19·9
143	....	....	− 0·25	− 0·25	−0·30	....	....	− 2·8	− 14·1	− 0·1
144	....	....	....	....	−0·42*f*	....	....	....	....	− 6·8*f*
145	....	....	....	+ 0·08	+0·09	....	....	+ 5·5	+ 2·5	− 3·4
146	....	....	+ 0·02	....	−0·55	....	....	− 0·0	....	− 1·1
147	....	....	− 0·04	+ 0·02	−0·29	....	....	− 0·3	+ 1·0	+ 5·0
148	....	....	− 0·07	+ 0·06	−0·07	....	....	− 5·5	− 13·6	− 1·5
149	....	....	+ 0·07	− 0·01	−0·06	....	....	− 5·7	− 0·3	− 7·1
150	....	....	− 0·01	+ 0·18	−0·17	....	....	+ 3·9	+ 3·1	− 4·3
151	....	....	....	− 0·01	−0·33	....	....	+ 1·7	− 5·3	− 3·7
152*	− 0·40	− 0·32	− 0·34	....	−0·32	+ 1·3	+ 1·1	+ 2·0	....	+10·1
153*	....	....	+ 0·34	+ 0·22	+0·03	....	....	− 0·7	− 3·0	− 3·1
154	....	....	+ 0·24	+ 0·30	−0·28	....	....	+ 2·5	+ 2·2	+ 5·7
155	....	....	....	+ 0·24	−0·03	....	....	+ 2·0	+ 1·8	+ 2·5
156	− 0·24	....	....	....	−0·10	− 0·1	....	+ 1·4	....	− 1·3
157	....	....	− 0·07	− 0·11	−0·14	....	....	+ 1·9	+ 3·1	+ 4·8
158	....	....	+ 0·01	+ 0·10	−0·14	....	....	− 0·3	− 3·5	+ 0·9
159	− 0·43	....	....	....	−0·29	+ 7·0	....	− 2·5	....	+ 2·2
160	....	....	+ 0·08	+ 0·15	−0·03	....	....	+ 27·4	+ 2·6	+ 1·5
161*	+ 1·65	− 0·11	....	....	−0·17	− 24·4	− 3·1	− 2·0	....	− 4·9
162	....	....	+ 0·08	+ 0·30	−0·11	....	....	+ 1·7	− 0·9	+ 1·6
163	....	....	+ 0·13	+ 0·07	−0·24	....	....	+ 2·4	+ 2·7	+ 5·7
164	....	....	+ 0·12	+ 0·07	−0·25	....	....	+ 3·9	+ 2·5	+ 2·6
165	....	....	− 0·04	+ 0·07	−0·23	....	....	+ 0·6	+ 2·2	− 2·9
166	....	....	+ 0·13	+ 0·21	−0·25	....	....	+ 3·2	+ 1·3	− 1·5
167	....	....	+ 0·04	+ 0·03	−0·25	....	....	− 0·7	+ 3·1	+ 5·1
168	....	....	− 0·24	+ 0·15	−0·22	....	....	+ 0·4	+ 1·3	+ 1·3
169	....	....	....	....	+0·15*f*	....	....	....	....	− 3·0*f*
170	....	....	− 0·05	+ 0·01	+0·06	....	....	− 1·4	+ 2·4	+ 2·8
171	....	....	+ 0·04	− 0·01	−0·12	....	....	+ 1·5	+ 2·7	+ 4·0
172	....	....	+ 0·01	....	+0·04	....	....	+ 0·1	....	− 3·1
173	....	....	....	....	−0·38	....	....	− 5·0	....	+ 5·6
174	....	− 0·74	....	....	−0·40	....	− 2·4	− 9·7	....	− 2·5
175	− 0·13	....	− 0·02	....	−0·86	+ 4·4	....	− 1·8	....	− 0·6

Nº	Stars.		Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
				h m s	s		° ′ ″	″		
176	Pis. Vol.		5	7 16 53·59	+0·000	33	−67 38 44·7	− 6·60	6	646 δ
177	31 Can. Maj.	η	3	7 17 22·40	+2·370	28	−28 58 36·4	− 6·64	47	
178	Argûs		4	7 23 50·46	+1·906	6	−42 57 40·4	− 7·17	5	655 σ
179	26 Monocer.		4·5	7 33 7·54	+2·870	4	− 9 9 40·8	− 7·92	6	
180	3 Argûs		5	7 36 59·14	+2·405	3	−28 33 12·3	− 8·23	6	
181	Argûs		5	7 39 12·01	+2·135	5	−37 33 37·7	− 8·41	6	683 *c* in P
182	7 Argûs	ξ	4	7 42 8·82	+2·520	8	−24 26 19·0	− 8·64	12	
183	9 Argûs		5	7 43 53·93	+2·781	6	−13 27 10·8	− 8·78	8	
184	Argûs		4·5	7 44 3·64	+1·826	5	−45 56 55·0	− 8·79	7	698 P in P
185	Argûs		5	7 46 22·55	+2·061	5	−40 8 30·7	− 8·97	5	704 *a* in P
186	Argûs		5	7 46 37·88	+2·121	6	−38 25 37·9	− 8·99	5	706 *b* in P
187	Argûs		5	7 48 18·53	+1·762	5	−47 39 48·3	− 9·12	5	713 R in P
188	Argûs		3	7 52 27·36	+1·530	20	−52 31 45·3	− 9·45	24	721 χ
189	Argûs		2·3	7 57 36·80	+2·108	22	−39 31 42·5	− 9·84	24	729 ζ
190	15 Argûs		3·4	8 0 18·35	+2·558	8	−23 49 8·9	−10·04	15	
191	Argûs		5	8 4 15·17	+1·847	8	−46 50 52·1	−10·34	10	
192	Argûs	γ^2	2	8 4 17·72	+1·848	32	−46 50 20·9	−10·35	39	737
193	20 Argûs		5	8 5 31·12	+2·756	3	−15 16 54·7	−10·44	7	
194	Pis. Vol.		5	8 7 20·93	+0·242	5	−68 7 4·0	−10·57	7	749 ι
195	Argûs		5	8 12 11·79	+2·250	8	−36 8 11·4	−10·93	6	750 *q* in P
196	Argus	ε	2	8 19 1·19	+1·242	46	−58 57 53·0	−11·43	49	761
197	Chamæl.		5	8 22 47·02	−1·415	5	−76 22 46·2	−11·69	5	770 α
198	Pis. Vol.		5	8 23 32·10	−0·441	4	−72 50 55·8	−11·75	5	769 η
199	Pis. Vol.		5	8 23 52·03	+0·689	5	−65 34 14·3	−11·76	5	768 β
200	Chamæl.		5	8 25 35·39	−1·568	3	−76 55 56·3	−11·89	5	774 θ
201	Pix. Naut.		5	8 33 27·12	+2·342	8	−34 42 33·5	−12·44	8	780 β
202	Argûs		5	8 34 59·37	+1·988	5	−46 2 49·4	−12·54	5	783 *b* in V
203	Argûs		4	8 35 25·43	+1·721	12	−52 19 14·2	−12·57	7	786 ο
204	Pix. Naut.		4·5	8 36 45·80	+2·406	5	−32 34 41·1	−12·67	9	788 α
205	Argûs		5	8 36 51·48	+1·334	5	−59 9 23·5	−12·67	5	791 *d* in C
206	Argûs	δ	3	8 40 0·60	+1·654	25	−54 5 18·5	−12·88	29	796 δ
207	Argûs		5	8 41 16·16	+2·030	5	−45 25 24·2	−12·90	5	794 *a* in V
208	Chamæl.		5	8 46 53·67	−1·765	9	−78 20 33·4	−13·34	5	817 η
209	Chamæl.		6	8 48 48·14	−1·775	6	−78 26 38·8	−13·46	5	822
210	Argûs		5	8 52 48·66	+1·474	8	−58 34 29·6	−13·72	5	821 b^1 in C

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C—J	Rumker. R—J	Taylor. T—J	Pond. P—J	Ast. Soc. A.S.—J	La Caille. C—J	Rumker. R—J	Taylor. T—J	Pond. P—J	Ast. Soc. A.S.—J
176	$+\overset{s}{0}{\cdot}51$	$-\overset{s}{0}{\cdot}21$	$-\overset{s}{0}{\cdot}27$	$\overset{s}{....}$	$-\overset{s}{0}{\cdot}09$	$+\overset{s}{0}{\cdot}4$	$\overset{s}{....}$	$+\overset{s}{1}{\cdot}0$	$\overset{s}{....}$	$+\overset{s}{6}{\cdot}1$
177	....	....	+ 0·01	— 0·02	+ 0·23	....	....	+ 2·9	+ 1·5	+ 0·8
178	+ 0·77	....	— 0·07	....	— 0·58	— 10·6	....	+ 1·3	....	— 4·0
179	....	....	— 0·17	+ 0·03	— 0·26	....	....	+ 4·8	+ 3·6	+ 5·5
180	....	....	— 0·04	+ 0·11	— 0·28	....	....	+ 3·9	— 0·2	+ 1·8
181	....	....	+ 0·04	....	— 0·14	....	....	+ 2·1	....	— 0·3
182	....	....	+ 0·13	+ 0·05	— 0·13	....	....	— 0·8	+ 3·0	+ 2·8
183	....	....	+ 0·01	+ 0·18	— 0·28	....	....	+ 3·7	+ 2·2	— 0·1
184	....	....	— 0·02	....	+ 0·07	....	....	— 0·3	....	+ 0·3
185	+ 0·08	....	....	....	+ 0·01 *f*	+ 6·4	....	....	....	— 1·1 *f*
186	....	....	— 0·08	....	— 0·47	....	....	+ 2·6	....	+ 3·4
187	....	....	— 0·10	....	+ 0·03	....	....	+ 5·3	....	— 1·4
188	....	+ 0·53	— 0·31	....	— 0·08	....	+ 5·1	+ 0·4	....	— 5·3
189	+ 0·06	....	— 0·10	....	— 0·28	+ 4·5	....	— 2·2	....	+ 1·7
190	....	....	— 0·15	+ 0·04	— 0·53	....	....	+ 2·7	+ 1·5	+ 4·2
191	....	— 0·44	0·00	....	+ 0·03	....	+ 4·8	+ 2·0	....	+ 0·1
192	+ 0·63	— 0·16	— 0·23	....	+ 0·08	+ 6·0	0·0	+ 10·9	....	— 2·1
193	....	....	+ 0·31	+ 0·16	— 0·20	....	....	— 2·2	+ 2·9	+ 6·8
194	....	....	....	....	— 0·29	....	....	....	....	— 4·4
195	....	....	+ 0·14	....	— 0·27	....	....	— 2·1	....	— 0·8
196	+ 0·03	— 0·13	— 0·02	....	— 0·05	— 7·3	+ 2·2	+ 1·1	....	— 6·9
197	+ 0·39	+ 0·01	....	....	— 0·32	— 6·9	— 9·8	....	....	— 7·0
198	....	....	— 1·22	....	— 0·84	....	....	— 22·7	....	— 12·7
199	....	....	+ 0·06	....	— 8·47	....	....	— 2·4	....	+ 9·7
200	....	— 0·38	....	....	— 0·25	....	+ 1·1	....	....	— 6·1
201	....	....	— 0·02	+ 0·02	— 0·66	....	....	— 4·1	— 23·7	+ 0·5
202	....	....	— 0·03	....	— 0·06	....	....	— 2·0	....	+ 0·9
203	+ 0·27	— 0·17	+ 0·02	....	+ 0·29	— 5·7	+ 7·1	+ 0·1	....	— 3·2
204	....	....	+ 0·23	+ 0·13	+ 0·04	....	....	+ 1·6	+ 1·0	+ 0·1
205	....	....	....	....	— 0·10	....	....	....	....	— 4·5
206	+ 0·21	— 0·26	— 0·15	....	0·00	+ 12·6	+ 0·7	0·0	....	— 7·5
207	....	....	— 0·21	....	— 0·16	....	....	— 1·5	....	+ 1·4
208	....	....	....	....	+ 0·03	....	....	....	....	— 9·7
209	....	....	....	....	— 0·80	....	....	....	....	— 10·0
210	....	— 0·10	+ 0·23	....	+ 0·06	....	— 2·9	— 0·8	....	— 2·7

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
			h m s	s		° ′ ″	″		
211	Argûs	5	8 55 13·77	+1·499	8	−58 26 5·0	−13·88	5	823 *b*² in C
212	Argûs	5	8 58 17·96	+2·068	6	−46 25 27·5	−14·07	8	827 *c* in V
213	Pisc. Vol.	4·5	8 59 44·85	+0·971	7	−65 43 8·8	−14·16	4	829 α
214*	Argûs	3	9 1 44·89	+2·201	31	−42 44 59·0	−14·28	23	830 λ
215	Argûs	5	9 4 39·17	+0·233	5	−71 55 8·0	−14·46	5	834 G in C
216	Argûs	5	9 6 29·66	+1·583	5	−58 16 23·0	−14·57	5	835 *a* in C
217	Argûs	5	9 7 25·02	+1·377	5	−61 37 17·1	−14·62	5	838 *i* in C
218	Argûs β	1·2	9 11 18·24	+0·729	30	−69 1 4·2	−14·86	39	848
219	Argûs	2	9 12 32·43	+1·609	9	−58 33 50·6	−14·92	11	849 ι
220	Pix Naut.	5	9 13 58·39	+2·660	7	−25 14 45·4	−15·01	16	
221	Argûs	3	9 16 51·42	+1·854	5	−54 17 13·8	−15·18	5	851 κ
222	30 Hydræ α	2	9 19 14·05	+2·948	90	− 7 55 34·3	−15·31	145	
223	Argûs	6	9 23 2·85	+1·318	3	−64 11 40·4	−15·53	5	865 *n* in C
224*	Argûs	4	9 24 0·68	+2·369	9	−39 43 30·8	−15·58	5	864 ψ
225	Argûs	5	9 26 3·78	+1·821	5	−56 17 13·5	−15·69	5	868 N in V
226	Argûs	5	9 29 30·96	+1·739	5	−58 28 24·1	−15·88	5	873 *h* in C
227	35 Hydræ ι	5	9 31 10·34	+3·063	15	− 0 22 31·5	−15·96	27	
228	38 Hydræ κ	5	9 32 9·51	+2·874	9	−13 33 54·6	−16·02	15	
229	Argûs	5	9 40 34·77	+1·649	5	−61 43 33·4	−16·45	5	890 *l* in C
230	Argûs	3·4	9 42 51·15	+1·504	17	−64 17 5·3	−16·56	26	894 υ
231	39 Hydræ υ¹	5	9 43 18·17	+2.880	11	−14 3 11·0	−16·58	24	
232	Argûs	4	9 50 54·37	+2·095	6	−53 45 38·9	−16·95	5	901 φ
233	41 Hydræ λ²	4·5	10 2 18·26	+2·934	6	−11 31 1·6	−17·46	9	
234	Argûs	4	10 7 36·81	+2·515	5	−41 16 55·7	−17·68	5	914 *q* in V
235	Argûs	4·5	10 9 41·65	+1·439	7	−69 11 42·9	−17·77	5	920 ω
236	Argûs	5	10 11 25·28	+1·991	5	−60 29 5·1	−17·83	5	922 *q* in C
237	Argûs	5	10 14 36·25	+2·214	6	−55 11 21·3	−17·96	5	926 T in V
238	Argûs	5	10 15 2·92	+2·557	5	−40 47 49·2	−17·98	5	925 *r* in V
239	42 Hydræ μ	4	10 17 52·45	+2·903	15	−15 58 16·4	−18·09	22	
240	Ant. Pneu.	4·5	10 19 22·98	+2·737	7	−30 12 15·5	−18·14	21	931 α
241	Argûs	5	10 21 0·48	+1·217	10	−73 10 3·3	−18·20	5	936 l in C
242	Argûs	4	10 25 59·90	+2·114	10	−60 48 43·1	−18·38	8	943 *p* in C
243	Argûs	5	10 30 10·58	+2·515	8	−47 20 39·4	−18·52	11	949 *p* in V
244	2 Crateris φ³	5	10 30 18·31	+2·922	19	−15 59 47·1	−18·53	22	
245	Chamæl.	5	10 33 24·00	+0·797	7	−77 43 36·7	−18·63	5	958 γ

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
211	^{s}	$-0^{s}{\cdot}01$	$-0^{s}{\cdot}14$	^{s}	$+0^{s}{\cdot}33$	$''$	$-3''{\cdot}2$	$+0''{\cdot}7$	$''$	$-5''{\cdot}2$
212	....	− 0·53	− 0·07	....	+ 0·16	....	+ 7·4	− 0·2	....	− 4·8
213	− 0·65	− 0·30	− 0·08	....	− 0·53	+ 10·4	+ 0·6	− 2·4	....	− 1·1
214*	+ 0·24	− 0·26	− 0·58	....	+ 0·18	− 0·5	+ 1·4	0·0	....	+ 3·4
215*	+ 1·76	− 1·53	....	....	− 1·13	− 43·5	....	− 13·4	....	− 4·7
216	....	− 0·26	+ 0·23	....	− 0·28	....	....	+ 0·9	....	− 14·4
217	....	− 0·37	....	....	− 0·34	....	− 5·0	+ 3·2	....	− 6·6
218*	+ 2·61	− 0·06	− 0·25	....	+ 0·76	− 7·0	− 0·5	+ 0·5	....	− 11·9
219	+ 0·61	....	− 0·11	....	− 1·77	− 5·8	....	....	....	− 3·9
220	....	....	+ 0·06	+ 0·09	− 0·35	....	....	− 3·5	+ 2·5	− 3·8
221	+ 0·35	− 0·40	− 0·08	....	− 0·12	+ 4·9	− 3·4	− 1·5	....	− 7·2
222	....	....	− 0·04	+ 0·02	− 0·36	....	....	+ 3·1	+ 2·8	+ 3·5
223	....	− 0·23	− 0·28	....	+ 2·87	....	+ 2·1	....	....	− 7·3
224*	....	+ 0·01	+ 0·57	....	+ 0·29	....	....	− 7·1	....	− 5·6
225	....	....	0·00	....	− 1·56	....	....	− 0·6	....	− 3·6
226	....	....	+ 0·17	....	+ 0·18	....	....	− 0·8	....	− 7·1
227	....	....	+ 0·25	+ 0·11	− 0·44	....	...	− 3·7	+ 2·5	+ 2·1
228	....	....	+ 0·09	+ 0·45	− 0·05	....	....	+ 4·2	+ 1·6	+ 0·9
229	....	− 0·10	....	....	− 1·67	....	− 3·6	+ 1·0	....	− 2·2
230	+ 0·09	− 0·09	− 0·15	....	− 0·09	− 1·0	− 0·5	− 2·7	....	0·0
231	....	....	+ 0·11	+ 0·12	+ 0·16	....	....	+ 4·0	....	+ 6·3
232	+ 0·48	− 0·43	+ 0·23	....	+ 0·03	− 4·3	− 5·1	+ 0·1	....	− 3·7
233	....	....	− 0·06	+ 0·06	− 0·53	....	....	+ 0·8	+ 1·5	+ 2·7
234	....	− 0·17	+ 0·25	....	+ 0·27	....	....	− 1·7	....	+ 6·0
235	+ 0·97	0·00	− 0·19	....	+ 0·19	− 0·3	+ 1·4	− 2·3	....	− 9·7
236	....	− 0·04	− 0·03	....	− 1·64	....	+ 3·0	− 1·2	....	− 6·9
237	....	....	− 0·01	....	− 1·79	....	....	− 4·6	....	− 1·4
238	....	+ 0·12	+ 0·10	....	+ 0·13	....	+ 0·1	− 1·2	....	+ 2·5
239	....	....	+ 0·11	+ 0·09	− 0·60	....	....	− 0·5	+ 2·3	+ 2·2
240	....	....	+ 0·09	....	+ 0·16	....	....	− 4·4	+ 1·4	+ 0·2
241	+ 0·35	− 0·46	....	....	− 2·16	+ 2·1	+ 6·8	− 6·0	....	− 5·9
242	+ 0·56	− 0·06	+ 0·12	....	+ 0·66	− 4·5	....	− 2·7	....	− 5·1
243	....	− 0·44	− 0·31	....	+ 0·18	....	....	− 0·3	....	− 5·7
244	....	....	0·00	− 0·08	+ 0·12	....	....	− 0·8	+ 3·0	+ 4·9
245	....	− 3·90	....	....	− 1·94	....	+ 1·6	....	....	− 1·1

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
246*	Argûs	5·6	$10^{h}\ 36^{m}\ 13^{s}{\cdot}34$	$+2^{s}{\cdot}106$	4	$-63^{\circ}\ 34'\ 41''{\cdot}4$	$-18''{\cdot}72$	5	
247	Argûs	3	10 36 54·97	+2·115	11	−63 30 18·7	−18·74	13	964 θ²
248	Argûs	2	10 38 29·37	+2·300	9	−58 47 33·3	−18·79	16	968 η
249	Argûs	3·4	10 39 28·65	+2·548	6	−48 31 24·2	−18·82	6	970 μ
250	4 Crateris	4	10 41 14·50	+2·945	12	−15 18 22·2	−18·87	19	
251*	Chamæl.	5	10 44 6·38	+0·682	3	−79 38 36·8	−18·95	5	978 δ²
252	Argûs	5	10 46 36·98	+2·396	5	−57 57 6·4	−19·03	5	979 κ in C
253	7 Crateris α	4	10 51 30·05	+2·905*	5	−17 23 41·9	−19·15	16	
254	9 Crateris	5	10 57 9·26	+2·889	7	−26 22 38·9	−19·29	13	
255	10 Crateris	5	11 0 31·27	+2·892	6	−27 9 36·8	−19·37	11	
256	11 Crateris β	4	11 3 18·38	+2·937	11	−21 53 57·5	−19·43	19	
257	74 Leonis φ	5	11 8 1·31	+3·054	6	− 2 43 25·7	−19·53	21	
258	12 Crateris δ	3·4	11 10 50·86	+2·998	10	−13 51 35·5	−19·58	22	
259	Centauri	4	11 13 17·09	+2·702	14	−53 33 36·6	−19·63	15	1004 π
260	14 Crateris ι	5	11 16 1·78	+3·023	7	− 9 55 41·4	−19·68	12	
261	15 Crateris γ	4	11 16 23·94	+2·992	9	−16 45 4·3	−19·68	13	
262	87 Leonis e	4·5	11 21 37·88	+3·060	19	− 2 3 59·9	−19·76	20	
263	19 Crateris ξ	4	11 24 39·36	+2·945	7	−30 55 2·8	−19·81	15	
264	Centauri	4	11 27 59·25	+2·717	12	−62 4 46·1	−19·85	13	1025 λ
265	21 Crateris θ	4	11 28 3·77	+3·039	8	− 8 51 46·4	−19·85	21	
266	27 Crateris ζ	4	11 36 9·49	+3·025	6	−17 24 20·5	−19·93	13	
267	28 Crateris	4	11 44 20·54	+3·009	5	−32 57 44·6	−20·00	6	
268*	Chamæl.	5	11 51 18·48	+2·838	9	−77 16 30·1	−20·03	5	1052 ε
269	Crucis	4·5	11 58 4·92	+3·045	8	−63 39 56·5	−20·04	5	1060 η
270	Centauri	3	11 59 35·19	+3·066	17	−49 46 30·6	−20·04	16	1064 δ
271	1 Corvi α	4·5	11 59 39·61	+3·067	7	−23 46 48·1	−20·04	18	
272	2 Corvi ε	4	12 1 23·74	+3·071	6	−21 40 25·3	−20·04	23	
273	Centauri	4	12 2 48·45	+3·088	6	−51 25 16·2	−20·04	7	1068 ρ
274	Crucis δ	3	12 6 10·28	+3·125	6	−57 48 9·5	−20·04	5	1070
275	4 Corvi γ	3	12 7 4·52	+3·080	7	−16 35 51·1	−20·03	38	
276*	Chamæl.	5	12 8 33·67	+3·316	7	−78 22 5·5	−20·03	5	1071 β
277*	Crucis ε	4	12 12 14·57	+3·188	21	−59 27 38·5	−20·01	5	1076
278*	Crucis	5	12 17 7·90	+3·257	9	−62 10 41·2	−19·99	9	
279*	Crucis α^1	1	12 17 12·67	+3·257	27	−62 9 19·8	−19·99	24	1082
280	Centauri	5	12 18 53·28	+3·196	5	−49 17 16·6	−19·98	7	1086 σ

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J.	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
246*	....	....	+ 0·57	....	− 1·58	....	....	+ 1·7	....	− 6·9
247	+ 0·24	− 0·21	− 0·25	....	− 2·05	− 0·1	+ 0·2	+ 1·0	....	+ 2·7
248	− 0·04	− 0·12	+ 0·14	....	+ 0·63	− 4·0	+ 4·2	+ 4·4	....	− 2·4
249	− 0·60	+ 0·13	+ 0·02	....	− 0·25	+ 6·2	+ 6·4	+ 2·3	....	+16·3
250	....	....	+ 0·12	+ 0·07	− 0·38	....	....	− 2·1	+ 2·5	+ 3·7
251*	+ 3·77	+ 0·59	....	....	− 1·94	− 0·8	− 3·9	....	....	− 5·9
252	....	− 0·33	+ 0·28	....	+ 1·36	....	− 0·4	+ 1·8	....	− 3·7
253	....	....	− 0·20	− 0·01	− 0·63	....	....	+ 0·3	+ 2·3	+ 1·2
254	....	....	+ 0·05	+ 0·11	− 0·14	....	....	− 0·6	+ 2·9	+ 1·3
255	....	....	+ 0·16	+ 0·04	+ 0·01	....	....	− 1·4	+ 1·3	+ 1·2
256	....	....	+ 0·24	− 0·07	+ 0·23	....	....	+ 1·5	+ 3·3	+ 3·3
257	....	....	− 0·04	− 0·03	− 0·69	....	....	− 0·2	+ 2·3	+ 7·5
258	....	....	....	− 0·04	− 0·13	....	....	....	+ 3·3	+ 7·2
259	....	− 0·01	0·00	....	− 0·69	....	+ 0·4	0·0	....	− 8·1
260	....	....	+ 0·05	− 0·10	− 0·03	....	....	− 3·5	+ 1·7	+ 7·3
261	....	....	− 0·04	− 0·10	− 0·66	....	....	+ 1·9	+ 2·3	+ 4·1
262	....	....	+ 0·03	0·00	− 0·03	....	....	− 0·5	+ 2·0	+ 2·7
263	....	....	+ 0·34	+ 0·14	− 0·59	....	....	− 1·6	− 1·3	− 1·2
264	− 0·50	+ 0·03	+ 0·19	....	+ 1·79	+ 0·4	+ 0·4	− 3·6	....	− 3·9
265	....	....	+ 0·04	+ 0·19	− 0·36	....	....	+ 4·6	+ 1·9	+ 6·3
266	....	....	− 0·01	− 0·07	− 0·66	....	....	− 0·5	+ 1·4	+ 0·9
267	....	+ 0·64	+ 0·09	+ 0·06	− 0·06	....	− 0·4	+ 3·7	− 2·4	− 0·4
268*	+ 3·24	+ 1·50	....	....	− 4·44	+ 5·1	− 3·9	....	....	− 5·1
269	....	− 0·40	− 0·09	....	+ 0·32	....	+ 2·0	+ 6·4	....	− 0·7
270	+ 0·25	....	+ 0·01	....	+ 0·37	+ 7·9	....	− 4·4	....	− 5·6
271	....	....	+ 0·08	+ 0·04	− 0·09	....	....	+ 2·5	+ 1·5	+ 0·6
272	....	....	+ 0·19	+ 0·01	− 0·24	....	....	....	+ 2·7	− 1·8
273	+ 0·60	− 0·08	− 0·06	....	− 1·21	− 0·7	+ 7·0	− 0·5	....	−11·0
274	+ 0·60	− 0·36	+ 0·29	....	− 1·76	− 2·0	− 1·8	+ 2·8	....	− 5·7
275	....	....	+ 0·01	+ 0·01	− 0·31	....	....	....	+ 2·5	+ 5·4
276*	+ 3·24	+ 0·40	....	....	− 5·73	+ 3·9	+ 4·3	....	....	− 8·7
277*	+ 2·01	− 0·52	....	....	− 1·43	−13·7	− 7·6	− 2·5	....	− 5·6
278*	....	....	....	....	− 2·00	....	....	....	....	−11·8
279*	+ 1·64	− 0·21	− 0·21	....	− 1·57	− 5·9	− 4·7	− 2·9	....	− 9·0
280	....	....	0·00	....	+ 0·56	....	....	+ 1·9	....	+14·7

Nº	Stars.		Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
				h m s	s		° ′ ″	″		
281	7 Corvi	δ	3	12 21 4·84	+3·102	6	−15 34 5·7	−19·96	15	
282	Crucis	γ	2·3	12 21 47·47	+3·259	22	−56 9 35·8	−19·95	23	1088
283	Muscæ	γ	4	12 22 25·83	+3·453	7	−71 11 35·6	−19·95	5	1090
284	8 Corvi	η	4·5	12 23 19·28	+3·105	6	−15 15 11·4	−19·94	11	
285	9 Corvi	β	2·3	12 25 28·35	+3·129	7	−22 27 17·7	−19·92	13	
286	Muscæ	α	4	12 27 8·68	+3·465	14	−68 11 50·5	−19·90	5	1092
287	Centauri		5	12 28 26·69	+3·250	7	−47 36 15·0	−19·89	6	1093 τ
288	Centauri		3	12 32 10·93	+3·276	11	−48 1 29·2	−19·85	8	1098 γ
289	29 Virginis	γ	4	12 33 3·10	+3·022*	7	− 0 30 56·9	−19·84	29	
290	Muscæ	β	4	12 35 57·16	+3·565	8	−67 10 32·6	−19·80	5	1104
291	Crucis	β	2	12 37 51·20	+3·431	43	−58 45 27·9	−19·77	29	1107
292	Centauri		5	12 44 3·06	+3·276	9	−39 15 8·2	−19·67	6	1112 n
293	Centauri		5	12 44 39·69	+3·456	5	−56 15 8·8	−19·66	5	1114 o
294	Muscæ	δ	4	12 50 43·19	+3·901	13	−70 37 47·2	−19·55	5	1119
295	Centauri		5	12 57 1·94	+3·446	14	−48 59 34·8	−19·43	7	1126 ξ²
296	45 Hydræ	ψ	4·5	12 59 55·00	+3·209	6	−22 12 24·5	−19·36	5	
297	51 Virginis	θ	4·5	13 1 9·33	+3·097	7	− 4 37 46·2	−19·33	18	
298	53 Virginis		5	13 3 1·43	+3·167	4	−15 16 44·3	−19·29	9	
299	61 Virginis		4·5	13 9 31·53	+3·106*	10	−17 21 46·6	−20·21*	18	
300	46 Hydræ	γ	4·5	13 9 41·89	+3·232	6	−22 16 18·6	−19·12	10	
301*	Centauri		3	13 11 4·18	+3·362	10	−35 48 45·5	−19·09	6	1143 ι
302	67 Virginis	α	1	13 16 14·88	+3·147	64	−10 16 17·6	−18·94	98	
303	68 Virginis	i	5	13 17 45·09	+3·161	3	−11 49 12·3	−18·90	6	
304	Centauri		5	13 21 13·20	+3·438	6	−38 31 34·5	−18·80	5	1150 d
305	Centauri	ε	3	13 29 10·54	+3·731	26	−52 35 53·0	−18·54	12	1155
306	1 Centauri	i	5	13 36 3·23	+3·410	14	−32 10 48·7	−18·31	7	1162
307	Centauri		4	13 39 20·79	+3·554	5	−40 50 11·3	−18·19	5	1165 ν
308	Centauri		4	13 39 24·71	+3·568	5	−41 37 22·9	−18·19	7	1166 μ
309	2 Centauri	g	5	13 39 37·47	+3·442	5	−33 35 53·2	−18·18	8	1167
310	3 Centauri	k	4·5	13 42 2·46	+3·430	6	−32 8 48·0	−18·09	6	1171
311	4 Centauri	h	5	13 43 27·05	+3·419	5	−31 5 1·9	−18·04	15	1173
312	Centauri		3	13 44 58·93	+3·691	7	−46 26 49·5	−17·98	7	1177 ζ
313	Centauri		4·5	13 47 58·53	+3·600	11	−41 15 58·8	−17·86	8	1182 φ
314	Centauri		5	13 48 13·28	+3·655	9	−43 58 9·5	−17·85	6	1183 υ¹
315	Centauri	β	1	13 51 54·50	+4·136	48	−59 32 50·9	−17·70	19	1185

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
281	....	....	....	+ 0·13	+ 0·21	....	....	− 2·0	+ 3·4	+ 4·4
282	− 0·56	− 0·19	+ 0·06	....	+ 0·53	+ 15·3	+ 0·4	− 0·5	....	+ 11·0
283	+ 1·36	+ 0·42	....	....	+ 1·61	+ 5·3	....	....	....	+ 4·9
284	....	....	+ 0·13	....	− 0·02	....	....	− 4·9	+ 0·8	+ 3·5
285	....	....	+ 0·12	....	− 0·56	....	....	− 2·3	+ 1·1	− 1·9
286	+ 0·23	+ 0·04	....	....	+ 0·58	+ 1·0	− 0·5	+ 2·3	....	+ 4·0
287	...	− 0·06	+ 0·08	....	+ 0·11	....	+ 6·1	+ 2·5	....	+ 5·7
288	+ 1·56	− 0·08	+ 0·09	....	+ 0·79	+ 6·6	+ 8·4	+ 6·7	....	+ 8·1
289	....	....	+ 0·01	− 0·01	− 0·07	....	....	....	+ 1·5	+ 1·0
290	+ 0·63	− 0·28	+ 0·44	....	+ 1·20	+ 1·8	+ 10·3	+ 0·4	....	+ 1·8
291	+ 0·01	− 0·19	− 0·04	....	+ 0·78	− 2·9	+ 3·6	+ 5·4	....	+ 5·3
292	....	+ 0·34	+ 0·21	....	− 0·07	....	+ 4·3	− 1·2	....	+ 4·5
293	....	....	+ 0·16	....	+ 0·41	....	....	+ 1·3	....	+ 3·8
294	− 0·58	− 0·18	....	....	− 1·25	+ 2·9	+ 4·5	− 5·5	....	+ 4·8
295	....	− 0·07	....	....	+ 1·10	....	+ 4·6	....	....	+ 9·2
296	....	....	....	+ 0·11	− 0·52	....	....	....	+ 3·8	+ 0·7
297	....	....	....	+ 0·18	+ 0·02	....	....	....	+ 2·6	+ 2·1
298	....	....	+ 0·23	+ 0·10	− 0·36	....	....	− 8·7	+ 1·8	− 16·7
299	....	....	+ 0·23	+ 0·40	− 0·37	....	....	+ 1·3	+ 2·1	+ 1·6
300	....	....	+ 0·05	− 0·04	− 0·21	....	....	+ 0·6	+ 3·4	+ 4·6
301•	+ 1·85	− 0·23	....	+ 0·06	+ 0·72	+ 8·4	+ 5·0	....	− 21·0	+ 4·2
302	....	....	+ 0·11	− 0·02	− 0·17	....	....	− 2·7	+ 2·7	+ 4·5
303	....	....	+ 0·01	− 0·03	− 0·64	....	....	− 1·5	+ 1·5	− 0·7
304	....	− 0·53	+ 0·04	....	− 0·03	....	+ 5·2	+ 1·7	....	+ 4·3
305	+ 0·58	− 0·35	− 0·03	....	+ 0·64	+ 8·6	− 4·1	+ 8·4	....	+ 12·7
306	....	....	+ 0·06	+ 0·13	+ 0·80	....	....	− 0·8	− 0·8	− 1·4
307	+ 0·17	− 0·38	− 0·07	....	− 0·07	+ 1·0	+ 8·7	....	....	+ 3·6
308	+ 0·08	+ 0·08	+ 0·24	....	+ 0·27	+ 2·7	+ 9·4	+ 1·5	....	+ 4·8
309	+ 0·22	....	+ 0·07	+ 0·21	− 0·03	+ 5·7	....	+ 0·3	− 3·6	− 2·1
310	+ 0·83	....	....	+ 0·06	+ 0·88	+ 2·1	....	− 3·6	− 0·5	+ 0·3
311	....	....	+ 0·11	− 0·06	− 0·01	....	....	....	+ 0·2	+ 4·0
312	+ 0·13	− 0·30	+ 0·03	....	+ 0·22	+ 5·8	+ 4·6	....	....	+ 5·1
313	....	....	+ 0·02	....	0·00	....	....	+ 1·1	....	+ 6·6
314	....	....	....	....	+ 0·33	....	....	− 0·1	....	+ 8·9
315	+ 0·51	+ 0·03	− 0·07	....	− 0·06	+ 5·7	− 4·1	− 0·5	....	+ 5·6

Nº	Stars.		Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
316	Centauri		5	$13^{h}\ 55^{m}\ 42^{s}$·27	+ 3^{s}·618	4	$-40^{\circ}\ 21'\ 39''$·1	$-17''$·54	7	1191 χ
317*	5 Centauri	θ	3	13 56 42·53	+ 3·491*	5	−35 31 47·1	−17·50	9	1192 θ
318	49 Hydræ	π	4·5	13 56 42·81	+ 3·384	5	−25 51 30·7	−17·50	16	
319	Octantis		5	14 0 40·38	+ 8·443	4	−82 52 37·6	−17·33	6	1190 δ
320	50 Hydræ		5	14 3 3·01	+ 3·408	4	−26 27 21·7	−17·22	7	
321	98 Virginis	κ	4	14 3 50·38	+ 3·183	3	− 9 28 42·3	−17·19	9	
322	99 Virginis	ι	4	14 7 6·68	+ 3·132	3	− 5 11 7·0	−17·04	7	
323	Lupi		4·5	14 8 33·77	+ 3·785	3	−45 16 5·6	−16·97	5	1201 ι
324	100 Virginis	λ	4	14 9 55·35	+ 3·228	4	−12 35 2·9	−16·91	7	
325	Centauri		5	14 10 15·01	+ 3·611	4	−37 5 55·0	−16·89	5	1205 ψ
326	Centauri		5	14 12 35·78	+ 3·654	7	−38 43 46·1	−16·78	5	1207 *a*
327	Octantis		7	14 13 33·60	+19·440	3	−87 25 35·9	−16·73	3	
328	Lupi		5	14 15 16·01	+ 3·798	9	−44 26 48·9	−16·65	6	1209 τ^1
329	Lupi		5	14 15 17·51	+ 3·802	6	−44 36 18·7	−16·65	5	1210 τ^2
330	105 Virginis	φ	5	14 19 27·13	+ 3·088	11	− 1 27 41·8	−16·45	21	
331	Lupi		5	14 21 13·03	+ 3·978	9	−49 41 51·8	−16·36	7	1216 σ
332	Centauri		3	14 24 44·92	+ 3·764	9	−41 24 20·6	−16·18	7	1219 η
333	Lupi		5	14 26 30·07	+ 3·974	4	−48 40 43·2	−16·08	6	1223 ζ
334	Apodis		4·5	14 27 9·99	+ 6·934	8	−78 18 42·5	−16·05	6	1218 α
335*	Centauri	α^1	4	14 28 6·25	+ 4·000*	7	−60 7 49·5	−16·00	7	1226
336*	Centauri	α^2	1	14 28 7·78	+ 4·000*	21	−60 7 33·2	−16·00	13	1227
337	Lupi	α	3	14 30 40·22	+ 3·932	6	−46 39 8·5	−15·87	6	1231
338	Centauri		5	14 31 25·71	+ 3·687	4	−37 3 30·3	−15·83	5	1232 *b*
339	Centauri		5	14 33 17·49	+ 3·636	7	−34 26 9·4	−15·72	5	1234 c^1
340	107 Virginis	μ	4·5	14 34 6·57	+ 3·140	3	− 4 54 52·2	−15·68	9	
341	6 Libræ		5	14 40 19·58	+ 3·511	3	−27 14 47·5	−15·34	7	
342	Lupi		5	14 40 34·79	+ 3·868	4	−42 51 55·0	−15·32	5	1246 *o*
343	9 Libræ	α^2	3	14 41 29·28	+ 3·305	42	−15 19 48·5	−15·27	60	
344	Lupi	β	3	14 47 26·27	+ 3·883	8	−42 26 32·2	−14·93	7	1254
345	15 Libræ	ξ^2	5	14 47 33·29	+ 3·237	5	−10 43 5·2	−14·92	14	
346	Centauri		4	14 48 8·34	+ 3·857	7	−41 24 56·0	−14·89	6	1255 κ
347	19 Libræ	δ	4·5	14 51 54·03	+ 3·193	7	− 7 50 20·3	−14·66	16	
348	Lupi		5	14 53 35·12	+ 4·032	5	−46 22 43·6	−14·56	6	1258 π
349	20 Libræ		3·4	14 54 8·32	+ 3·490	5	−24 36 26·5	−14·53	16	
350	Lupi		5	14 57 26·08	+ 3·991	6	−44 37 7·8	−14·33	7	1263 λ

Nº	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	"	"	"	"	"
316	....	....	+0·04	....	−0·37	....	....	−0·5	....	+7·6
317*	−3·42	....	0·00	−0·07	+0·54	+45·7	....	−2·0	−8·4	+0·2
318	....	....	−0·02	+0·02	−0·17	....	....	−3·0	+1·7	−0·6
319	+8·00	+0·28	....	....	+2·60	+2·5	−2·0	....	....	+13·4
320	....	....	+0·09	−0·25	+0·02	....	....	−3·1	+2·5	+2·4
321	....	....	+0·02	+0·04	+0·02	....	....	−1·5	+2·7	−4·0
322	....	....	+0·10	+0·04	−0·11	....	....	−5·3	+1·3	+3·9
323	−0·96	−0·41	+0·12	....	−0·40	+5·6	....	−3·6	....	+5·1
324	....	....	+0·26	+0·32	−0·09	....	....	....	+2·4	+3·5
325	....	....	....	....	+0·45*f*	....	....	....	....	+2·5*f*
326	....	−0·59	....	....	+0·42*f*	....	+4·6	....	....	−0·7*f*
327	....	....	....	....	....	....	....	....	....	....
328	....	....	+0·08	....	−0·18	....	....	−0·3	....	+6·2
329	....	....	+0·15	....	−0·34	....	....	−3·2	....	+2·7
330	....	....	+0·04	−0·05	−0·25	....	....	....	+1·3	+1·4
331	....	....	+0·18	....	+0·69	....	....	0·0	....	+7·6
332	−0·26	+0·21	+0·05	....	+0·28	+6·8	....	....	....	+4·8
333	....	....	+0·12	....	−1·15	....	....	....	....	+1·5
334	....	....	....	....	+2·17	....	−0·8	....	....	+6·0
335*	+37·21	....	....	....	+5·51	−65·3	....	....	....	−6·6
336*	+37·35	+1·43	−0·47	....	+5·88	−65·4	−1·3	−4·2	....	+2·1
337	+0·16	....	+0·02	....	+0·56	+8·2	....	....	....	+2·6
338	....	....	....	....	+0·23*f*	....	....	....	....	−0·8*f*
339	....	....	−0·20	−0·09	+0·12	....	....	−2·2	....	+9·7
340	....	....	....	+0·18	+0·04	....	....	....	+3·2	+3·6
341	....	....	+0·04	−0·04	−0·19	....	....	+0·7	+3·6	+2·7
342	....	....	+0·35	....	−0·14	....	....	0·0	....	+5·2
343	....	....	−0·02	+0·08	+0·02	....	....	−1·3	+2·9	+4·8
344	−0·04	−0·54	−0·06	....	−0·04	+12·6	+7·8	+0·3	....	+4·6
345	....	....	+0·24	+0·16	+0·32	....	....	−1·8	+2·3	+3·2
346	−0·16	−0·53	+0·11	....	+0·07	+7·5	−14·0	+0·1	....	+0·7
347	....	....	+0·13	+0·04	−0·21	....	....	....	+2·1	+3·4
348	+0·84	....	+0·25	....	+0·14	+7·8	....	−1·0	....	+4·9
349	....	....	+0·19	+0·34	−0·17	....	....	−3·4	+2·7	+3·7
350	....	....	....	....	−0·01	....	....	....	....	+7·0

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
			h m s	s		° ′ ″	″		
351	Lupi	4	15 0 7·49	+4·255	6	−51 26 41·1	−14·16	6	1265 ζ
352	Lupi	5	15 0 9·69	+4·122	3	−48 5 2·5	−14·16	6	1266 κ
353*	Triang. Aust. γ	3	15 3 10·40	+5·444	17	−68 2 29·1	−13·97	8	1267
354	Circini	5	15 4 16·49	+4·617	7	−58 9 28·1	−13·90	5	1271 β
355	Lupi	5	15 6 45·05	+4·120	5	−47 14 27·9	−13·75	6	1274 μ
356	2 Lupi	4·5	15 7 30·63	+3·620	6	−29 30 58·8	−13·70	10	1277 *f*
357	27 Libræ β	2·3	15 7 52·24	+3·218	10	− 8 44 59·6	−13·68	17	
358	Lupi δ	4	15 10 14·55	+3·896	6	−40 1 29·8	−13·53	7	1283
359	Lupi	5	15 10 18·36	+4·137	5	−47 18 4·2	−13·52	6	1281 ν
360	Lupi	5	15 11 3·22	+3·777	5	−35 38 15·6	−13·47	7	1286 φ¹
361	Lupi	4·5	15 11 10·52	+4·026	8	−44 4 14·1	−13·47	7	1285 ι
362	Triang. Aust.	5	15 21 16·27	+5·350	19	−65 44 4·6	−12·80	8	1292 ι
363	Lupi γ	3	15 23 50·62	+3·957	11	−40 35 15·1	−12·62	5	1293
364	37 Libræ	4	15 25 53·92	+3·242	4	− 9 28 31·7	−12·55	7	
365	38 Libræ γ	4·5	15 26 1·61	+3·333	3	−14 12 59·8	−12·48	5	
366	39 Libræ	5	15 26 43·43	+3·615	6	−27 33 52·3	−12·43	5	
367	40 Libræ	4·5	15 28 14·11	+3·657	6	−29 12 41·5	−12·32	6	
368	43 Libræ κ	5	15 32 10·07	+3·438	5	−19 7 14·8	−12·05	10	
369	44 Libræ η	4·5	15 34 31·27	+3·359	4	−15 7 26·6	−11·89	6	
370	5 Lupi	4·5	15 40 10·72	+3·783	5	−33 6 5·2	−11·48	5	1312 χ
371*	Triang. Aust. β	3	15 40 14·87	+5·208	14	−62 53 43·5	−11·48	5	1311
372	32 Serpentis μ	3·4	15 40 45·41	+3·124	4	− 2 54 14·2	−11·44	7	
373	1 Scorpii *b*	5	15 40 46·33	+3·585	3	−25 13 37·4	−11·44	8	
374	2 Scorpii A¹	5	15 43 25·30	+3·579	4	−24 48 40·3	−11·25	7	
375	45 Libræ λ	5	15 43 28·81	+3·463	5	−19 39 5·0	−11·25	6	
376	46 Libræ θ	4·5	15 44 9·54	+3·390	8	−16 13 23·3	−11·20	8	
377	5 Scorpii ρ	4	15 46 24·41	+3·679	7	−28 42 35·1	−11·03	5	
378	6 Scorpii π	3·4	15 48 35·08	+3·606	7	−25 37 2·2	−10·87	12	
379	48 Libræ	4	15 48 40·72	+3·343	5	−13 46 55·7	−10·87	7	
380	Lupi	4	15 48 52·89	+3·943	6	−37 54 8·0	−10·85	7	1325 η
381	7 Scorpii δ	3	15 50 17·72	+3·527	7	−22 7 48·1	−10·75	10	
382	Normæ	5	15 54 30·43	+4·198	5	−44 42 10·1	−10·43	6	
383	51 Libræ	4·5	15 55 1·74	+3·288	5	−10 53 52·0	−10·40	9	
384	Lupi	5	15 55 27·15	+3·908	5	−36 19 52·7	−10·36	8	1335 θ
385	8 Scorpii β¹	2	15 55 33·87	+3·469	9	−19 19 57·7	−10·36	14	

Nº	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
351	$\overset{s}{\cdots}$	$-\,0^{s}{\cdot}26$	$-\,0^{s}{\cdot}39$	$\overset{s}{\cdots}$	$+\,0^{s}{\cdot}85$	$\overset{\prime\prime}{\cdots}$	$+\,6''{\cdot}9$	$-\,1''{\cdot}2$	$\overset{\prime\prime}{\cdots}$	$+\,1''{\cdot}0$
352	....	....	....	....	+ 0·13	....	....	+ 3·7	....	+ 1·4
353*	+ 1·33	− 0·21	....	....	+ 0·64	+ 2·8	− 0·1	....	....	+ 3·0
354	....	....	+ 0·29	....	+ 1·47	....	....	....	....	+ 3·5
355	....	− 0·04	+ 0·32	....	+ 0·77	....	+ 2·0	− 3·6	....	+ 7·2
356	....	....	....	+ 0·07	− 0·14	....	....	....	....	− 2·5
357	....	....	+ 0·04	− 0·03	− 0·25	....	....	+ 4·3	+ 1·1	+ 3·9
358	+ 0·18	....	....	....	+ 0·30	+ 5·2	....	....	....	+ 6·1
359	....	....	....	....	+ 2·23	....	+ 4·2	....	....	+ 2·0
360	....	....	....	....	− 0·43	....	....	....	....	+ 2·5
361	+ 0·02	....	....	....	− 0·05	+ 7·6	....	....	....	+ 7·7
362	....	+ 0·05	....	....	+ 0·47	....	+ 0·5	....	....	− 1·4
363	− 0·31	....	+ 0·19	....	+ 0·14	+ 6·6	+ 4·3	....	....	+ 5·3
364	....	....	+ 0·03	− 0·07	− 0·38	....	....	....	+ 2·3	+ 1·2
365	....	....	− 0·03	+ 0·16	− 0·30	....	....	+ 2·9	+ 4·1	+ 9·5
366	....	....	....	+ 0·04	− 0·20	....	....	....	+ 2·1	+ 1·3
367	....	....	+ 0·14	+ 0·22	− 0·22	....	....	+ 1·1	+ 4·5	+ 4·4
368	....	....	− 0·15	− 0·04	− 0·20	....	....	....	+ 1·8	+ 6·0
369	....	....	....	+ 0·18	− 0·16	....	....	− 4·8	+ 1·5	+ 3·4
370	....	....	0·00	− 0·14	− 0·07	....	....	....	− 1·1	+ 1·5
371*	+ 1·88	− 0·13	....	....	+ 0·93	+33·4	+ 2·7	....	....	+15·4
372	....	....	....	+ 0·02	− 0·05	....	....	+ 3·3	+ 2·5	+ 6·9
373	....	....	....	− 0·07	− 0·41	....	....	....	+ 3·2	+ 0·5
374	....	....	....	+ 0·11	− 0·49	....	....	....	− 0·1	− 0·1
375	....	....	....	− 0·08	− 0·41	....	....	....	+ 0·5	+ 3·8
376	....	....	+ 0·07	+ 0·09	+ 0·27	....	....	....	+ 2·9	+ 3·2
377	....	....	+ 0·12	+ 0·10	− 0·11	....	....	....	+10·9	+ 1·9
378	....	....	+ 0·01	+ 0·04	− 0·05	....	....	− 0·9	+ 5·3	+ 2·6
379	....	....	....	0·00	+ 0·01	....	....	....	+ 3·7	+ 4·0
380	....	....	....	....	+ 0·07	....	....	....	....	+ 5·3
381	....	....	+ 0·01	+ 0·04	+ 0·08	....	....	− 3·2	+ 1·5	+ 5·7
382	....	....	....	....	+ 0·20	....	....	− 2·5	....	+ 3·7
383	....	....	+ 0·22	− 0·01	− 0·10	....	....	....	+ 3·9	+ 6·6
384	....	....	....	....	− 0·23	....	....	....	−20·3	+ 2·6
385	....	....	+ 0·14	+ 0·09	+ 0·12	....	....	....	+ 2·3	+ 4·2

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
386	9 Scorpii ω¹	4·5	h 15 m 56 s 52·40	+ s 3·490	5	−20° 12′ 4″·0	−10″·26	7	
387	10 Scorpii ω²	4·5	15 57 26·85	+ 3·496	6	−20 24 6·2	−10·21	8	
388	Octantis	6·7	15 59 39·70	+19·608	8	−86 0 4·7	−10·04	10	
389	Triang. Aust.	5	16 0 2·43	+ 5·362	13	−63 14 22·4	−10·02	5	1338 δ
390	13 Scorpii c²	5	16 1 51·01	+ 3·673	4	−27 28 37·5	− 9·88	8	
391	14 Scorpii ν	4	16 2 7·56	+ 3·469	3	−19 0 40·1	− 9·86	7	
392	15 Scorpii ψ	5	16 2 42·96	+ 3·265	3	− 9 37 0·6	− 9·82	6	
393	1 Ophiuchi δ	3	16 5 26·72	+ 3·135	28	− 3 15 0·2	− 9·61	45	
394	18 Scorpii	5	16 6 ..	+ 3·231	..	− 7 54 45·6	−10·06*	8	
395	Normæ	5	16 6 ..	+ 4·458	..	−49 38 1·1	− 9·48	5	
396	Normæ	5	16 7 9·26	+ 4·458	4	−49 43 43·4	− 9·48	5	1351 γ²
397	Apodis	5	16 7 40·60	+ 8·860	7	−78 29 44·2	− 9·43	5	1346 γ
398	2 Ophiuchi ε	3	16 9 20·11	+ 3·156	8	− 4 16 16·3	− 9·31	12	
399	20 Scorpii σ	4	16 10 52·17	+ 3·626	6	−25 10 35·7	− 9·19	12	
400	4 Ophiuchi ψ	5	16 14 9·90	+ 3·495	5	−19 37 54·1	− 8·93	8	
401	5 Ophiuchi ρ	5	16 15 24·25	+ 3·578	6	−23 2 49·7	− 8·83	7	
402	7 Ophiuchi χ	5	16 17 10·93	+ 3·461	3	−18 3 47·1	− 8·69	7	
403	3 Ophiuchi υ	5	16 18 37·00	+ 3·237	3	− 7 59 2·8	− 8·58	7	
404	21 Scorpii α	1	16 18 59·87	+ 3·659	45	−26 2 47·8	− 8·55	62	
405	Normæ	5	16 20 17·65	+ 3·895	3	−34 19 30·9	− 8·45	5	1371 ε
406	8 Ophiuchi φ	4·5	16 21 25·15	+ 3·422	4	−16 14 4·7	− 8·36	5	
407	9 Ophiuchi ω	5	16 22 4·31	+ 3·537	4	−21 5 40·2	− 8·31	8	
408	Normæ	5	16 25 12·30	+ 3·922	6	−34 53 47·3	− 8·06	7	
409	23 Scorpii τ	3·4	16 25 18·82	+ 3·715	8	−27 51 17·3	− 8·05	7	
410	12 Ophiuchi	5·6	16 27 26·16	+ 3·110	3	− 1 57 17·0	− 7·88	5	
411	13 Ophiuchi ζ	3·4	16 27 48·38	+ 3·290	3	−10 12 56·5	− 7·85	10	
412	Triang. Aust. α	2	16 30 45·08	+ 6·241	24	−68 42 4·0	− 7·61	6	1381
413	24 Scorpii	5	16 31 45·04	+ 3·456	5	−17 24 18·4	− 7·53	15	
414	Aræ	4	16 35 8·90	+ 5·119	9	−58 43 33·3	− 7·25	7	1386 η
415	26 Scorpii ε	3	16 39 10·17	+ 3·870	9	−33 58 33·4	− 6·92	9	
416	Scorpii	3	16 40 22·35	+ 4·041	8	−37 44 47·9	− 6·83	8	1392 μ¹
417	20 Ophiuchi	5	16 40 26·29	+ 3·300	4	−10 28 29·8	− 6·82	8	
418	Scorpii	4	16 40 50·32	+ 4·040	5	−37 43 5·8	− 6·79	6	1393 μ²
419	Aræ	3·4	16 44 35·10	+ 4·923	12	−55 42 36·3	− 6·48	8	1399 ζ
420	23 Ophiuchi	5	16 45 30·88	+ 3·198	5	− 5 52 7·2	− 6·40	12	

Nº	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	″	″	″	″	″
386	....	....	+ 0·29	+ 0·26	+ 0·36	....	....	....	+ 2·2	+ 4·4
387	....	....	....	+ 0·16	− 0·17	....	....	....	+ 2·9	+ 7·1
388	....	....	....	....	....	....	....	....	....	....
389	....	− 0·09	− 0·15	....	+ 0·57	....	+ 0·5	+ 3·2	....	+ 6·1
390	....	....	....	0·00	+ 0·44	....	....	....	+ 2·7	+ 1·6
391	....	....	+ 0·19	+ 0·14	+ 0·24	....	....	....	+ 1·4	0·0
392	....	....	....	− 0·03	− 0·12	....	....	....	+ 2·8	+ 3·5
393	....	....	....	− 0·06	− 0·39	....	....	+ 3·9	+ 2·3	+ 5·9
394	....	....	....	....	....	....	....	+ 2·6	+ 2·6	+ 5·0
395	....	....	....	....	....	....	....	....	....	....
396	....	....	+ 0·26	....	− 0·10	....	....	....	....	+ 1·3
397	....	+ 1·33	....	....	+ 1·14	....	+ 1·1	....	....	+ 4·2
398	....	....	+ 0·05	− 0·04	− 0·26	....	....	+ 1·0	+ 1·1	+ 5·1
399	....	....	....	+ 0·07	− 0·11	....	....	− 3·9	+ 3·2	+ 5·0
400	....	....	+ 0·24	+ 0·08	+ 0·18	....	....	....	+ 2·8	+ 2·7
401	....	....	....	+ 0·13	− 0·04	....	....	....	+ 1·2	+ 4·4
402	....	....	− 0·03	+ 0·04	− 0·77	....	....	....	+ 4·1	+ 5·1
403	....	....	....	+ 0·08	− 0·45	....	....	+ 0·3	+ 2·6	+ 2·4
404	....	....	....	− 0·11	+ 0·16	....	....	+ 0·3	+ 4·2	+ 3·6
405	....	....	− 0·07	+ 0·07	+ 0·02	....	....	....	− 5·6	+ 2·5
406	....	....	+ 0·10	− 0·05	+ 0·05	....	....	....	+ 2·9	+ 4·9
407	....	....	....	− 0·01	− 0·07	....	....	....	+ 3·8	+ 5·8
408	....	....	....	....	− 0·22*f*	....	....	....	....	− 6·2*f*
409	....	....	+ 0·11	+ 0·07	+ 0·06	....	....	....	+ 3·2	+ 4·9
410	....	....	....	+ 0·04	− 0·37	....	....	....	+ 1·5	+ 4·6
411	....	....	+ 0·07	+ 0·04	− 0·09	....	....	− 3·6	+ 2·8	+ 5·5
412	− 0·29	+ 0·05	....	....	+ 1·48	+ 5·8	− 2·2	....	....	+ 7·0
413	....	....	+ 0·05	+ 0·04	− 0·08	....	....	+ 0·3	+ 2·6	+ 3·3
414	....	....	+ 0·39	....	+ 0·92	....	....	....	....	+ 8·7
415	....	....	....	+ 0·03	− 0·08	....	....	+ 1·5	− 4·4	+ 0·9
416	+ 0·06	....	....	....	− 0·15	+ 6·0	....	....	....	+ 5·4
417	....	....	− 0·03	− 0·08	− 0·32	....	....	0·0	+ 2·6	+ 7·4
418	....	....	....	....	− 0·01	....	....	....	....	+ 4·3
419	+ 0·40	....	....	....	+ 0·72	+ 5·4	....	− 2·0	....	+ 4·2
420	....	....	+ 0·05	+ 0·11	− 0·13	....	....	....	+ 3·5	+ 4·2

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
421	Aræ	4·5	$16^{h}\ 46^{m}\ 3^{s}{\cdot}84$	+ $4^{s}{\cdot}744$	11	$-52^{\circ}\ 53'\ 16''{\cdot}5$	$-6''{\cdot}35$	6	1402 ε
422	Scorpii	5	16 53 39·07	+ 3·927	10	−33 52 28·8	−5·72	10	1410 *k*
423	Octantis	6	16 55 6·76	+100·83	13	−89 14 59·4	−5·60	15	1275 σ
424*	Scorpii	3·4	16 59 59·61	+ 4·272	7	−43 0 18·2	−5·19	9	1413 η
425	35 Ophiuchi η	2·3	17 0 38·06	+ 3·426	11	−15 30 22·2	−5·13	19	
426	36 Ophiuchi A	4·5	17 4 54·22	+ 3·671*	5	−26 20 38·0	−6·02*	6	
427*	39 Ophiuchi ο	4·5	17 7 53·36	+ 3·074	5	− 0 14 47·9	−4·52	6	
428	40 Ophiuchi ξ	4·5	17 10 49·46	+ 3·567	3	−20 55 19·0	−4·27	5	
429	Aræ γ	3	17 11 6·48	+ 5·021	5	−56 12 20·0	−4·24	5	1422
430	Aræ β	3	17 11 11·32	+ 4·958	1	−55 21 27·7	−4·24	3	1423
431	53 Serpentis ν	4·5	17 11 16·33	+ 3·362	5	−12 39 59·9	−4·23	5	
432	42 Ophiuchi θ	3·4	17 11 34·72	+ 3·672	3	−24 49 15·2	−4·20	5	
433	Octantis	6	17 14 54·90	+34·602	15	−87 37 12·8	−3·91	15	
434	Aræ δ	4	17 15 46·70	+ 5·389	10	−60 31 42·9	−3·84	7	1433
435	45 Ophiuchi *d*	5	17 16 30·52	+ 3·817	4	−29 42 13·1	−3·78	12	
436	Aræ α	3	17 18 42·96	+ 4·620	7	−49 43 48·6	−3·59	6	1436
437	34 Scorpii υ	3·4	17 19 13·06	+ 4·065	4	−37 9 2·6	−3·55	5	
438	51 Ophiuchi c^{2}	5	17 21 3·10	+ 3·649	5	−23 49 20·2	−3·39	10	
439	35 Scorpii λ	3	17 22 4·53	+ 4·060	5	−36 58 12·5	−3·30	6	
440	Scorpii	3	17 25 6·87	+ 4·295	5	−42 52 46·4	−3·04	5	1446 θ
441	55 Serpentis ξ	5	17 27 51·55	+ 3·430	3	−15 17 1·2	−2·80	5	
442	57 Ophiuchi μ	5	17 28 36·58	+ 3·254	2	− 8 0 27·0	−2·74	6	
443	Pavonis	4·5	17 29 4·30	+ 5·859	5	−64 37 43·0	−2·70	5	1449 η
444	Scorpii	3	17 30 44·22	+ 4·139	4	−38 55 58·0	−2·55	6	1456 κ
445*	56 Serpentis ο	4·5	17 31 51·90	+ 3·369	5	−12 46 36·2	−2·46	7	
446	58 Ophiuchi	5	17 33 14·80	+ 3·593	4	−21 35 30·3	−2·33	8	
447	Scorpii	3	17 35 42·12	+ 4·185	7	−40 3 4·7	−2·12	8	1462 ι^{1}
448	3 Sagittarii	5	17 36 52·00	+ 3·768	6	−27 45 24·0	−2·02	10	
449	Telescopii γ	4	17 38 17·51	+ 4·069	9	−36 58 45·0	−1·90	7	1468
450	Sagittarii	5	17 48 10·45	+ 3·845	7	−30 13 33·3	−1·03	7	1473
451	4 Sagittarii	5	17 49 25·00	+ 3·656	6	−23 47 29·6	−0·93	6	
452	64 Ophiuchi ν	4	17 49 40·27	+ 3·297	4	− 9 44 41·8	−0·90	7	
453	57 Serpentis ζ	5	17 51 30·45	+ 3·154	3	− 3 40 19·3	−0·74	6	
454	Aræ	4	17 53 24·10	+ 4·666	5	−50 5 28·0	−0·58	5	1480 θ
455	69 Ophiuchi τ	5	17 53 49·77	+ 3·260	3	− 8 10 20·7	−0·54	5	

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	″	″	″	″	″
421	− 0·23	....	....	....	+ 0·60	+ 4·0	− 0·9	....	....	+ 4·2
422	....	....	+ 0·20	+ 0·05	+ 0·20	....	....	+ 2·2	− 3·1	+ 1·7
423	....	....	....	....	....	....	....	....	....	....
424*	− 0·28	....	+ 0·62	....	− 0·18	+25·1	....	+11·1	....	+12·8
425	....	....	+ 0·29	+ 0·14	+ 0·09	....	....	− 2·1	+ 2·1	+ 6·2
426	....	....	+ 0·11	+ 0·16	+ 0·40	....	....	− 2·2	+ 2·0	+ 3·1
427*	....	....	− 0·38	+ 0·46	+ 0·14	....	....	+ 2·6	+ 2·7	+ 3·6
428	....	....	− 0·17	− 0·14	+ 0·46	....	....	....	+ 3·5	+ 2·3
429	− 0·18	....	....	....	+ 1·94	− 0·9	+ 0·8	+ 0·7	....	+ 1·3
430	− 0·25	....	....	....	− 0·27	+ 9·4	+ 2·7	....	....	+ 9·1
431	....	....	....	+ 0·07	+ 0·18	....	....	....	+ 2·8	+ 6·5
432	....	....	+ 0·07	− 0·14	− 0·18	....	....	....	+ 2·9	+ 3·4
433	....	....	....	....	....	....	....	....	....	....
434	+ 0·44	....	....	....	+ 1·64	+ 8·5	....	− 1·1	....	+ 0·6
435	....	....	− 0·08	− 0·10	− 0·06	....	....	− 4·4	+ 4·4	− 2·9
436	− 0·24	....	....	....	+ 0·56	+ 9·0	+ 5·9	....	....	− 0·1
437	− 0·12	....	....	− 0·01	− 0·01	+ 4·7	....	....	....	+ 5·6
438	....	....	....	− 0·11	+ 0·21	....	....	+ 2·4	+ 3·3	+ 3·6
439	− 0·08	....	+ 0·14	+ 0·02	+ 0·12	+ 1·7	....	+ 1·8	−21·1	+ 9·0
440	− 0·24	....	....	....	− 0·09	+ 0·2	....	+ 4·1	....	+ 7·2
441	....	....	+ 0·01	− 0·14	− 0·30	....	....	− 3·4	+ 5·9	+ 5·9
442	....	....	− 0·05	− 0·04	− 0·50	....	....	+ 2·7	+ 2·1	+ 5·1
443	+ 0·24	....	....	....	+ 1·16	+14·0	− 4·6	....	....	+ 9·5
444	− 0·22	....	+ 0·19	....	− 0·18	+ 0·2	....	+ 3·3	....	+ 4·7
445*	....	....	+ 0·12	− 0·11	− 0·27	....	....	+ 5·2	+ 2·2	+ 6·5
446	....	....	....	+ 0·10	+ 0·33	....	....	+ 0·7	+ 3·1	+ 7·5
447	+ 0·24	....	+ 0·26	....	− 0·51	+ 6·6	....	− 8·3	....	+ 5·8
448	....	....	− 0·12	− 0·20	− 0·50	....	....	....	+ 3·1	+ 4·3
449	....	....	....	....	− 0·35	....	....	+ 1·4	−14·6	+ 3·5
450	....	....	+ 0·14	− 0·02	− 0·10	....	....	− 3·7	+ 1·6	+ 0·8
451	....	....	− 0·06	− 0·08	− 0·04	....	....	+ 3·0	+ 3·1	+ 5·5
452	....	....	− 0·03	0·00	− 0·30	....	....	− 2·6	+ 2·4	+ 9·7
453	....	....	....	+ 0·05	− 0·23	....	....	....	+ 3·8	+ 5·5
454	....	....	....	....	− 0·66	....	....	− 3·3	....	+ 0·3
455	....	....	+ 0·02	− 0·20	− 0·54	....	....	+ 4·0	+ 3·3	+ 3·2

N°	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	N° of Obs.	Mean Declination, 1830.	Annual Variation.	N° of Obs.	La Caille's N° and Letter.
456	Sagittarii	5	$17^{h}\ 54^{m}\ 9^{s}{\cdot}85$	$+3^{s}{\cdot}826$	4	−29° 34′ 41″·3	−0″·51	7	1484 γ¹
457	10 Sagittarii γ	4	17 54 53·46	+3·852	3	−30 24 59·6	−0·45	7	1486 γ²
458	Sagittarii	5	17 57 19·29	+3·792	4	−28 27 58·5	−0·24	8	1495
459	Telescopii	5	17 58 36·84	+4·449	6	−45 58 23·3	−0·12	5	1496 ε
460	13 Sagittarii μ	3·4	18 3 35·86	+3·583	14	−21 5 40·1	+0·31	25	
461*	Telescopii β	4	18 6 7·58	+4·067	9	−36 48 12·3	+0·54	7	1503
462	19 Sagittarii δ	3·4	18 10 6·69	+3·835	11	−29 53 26·8	+0·88	12	
463	58 Serpentis η	4	18 12 31·04	+3·092*	11	− 2 56 9·1	+0·41*	15	
464	20 Sagittarii ε	3	18 12 53·36	+3·983	7	−34 27 20·3	+1·13	9	
465	Telescopii α	4	18 14 21·94	+4·451	7	−46 3 4·0	+1·26	7	1513
466	Pavonis	5	18 15 29·23	+5·614	7	−62 22 22·6	+1·35	5	1512 η
467	22 Sagittarii λ	4	18 17 28·85	+3·704	7	−25 30 25·0	+1·53	20	
468	Telescopii	5	18 19 9·74	+4·447	5	−46 1 7·4	+1·67	6	1520 δ¹
469	Telescopii	5	18 19 27·42	+4·439	4	−45 51 47·5	+1·70	5	1524 δ²
470	Clyp. Sob.	5	18 19 30·64	+3·416	5	−14 39 59·1	+1·71	7	
471	Cor. Aust.	5	18 21 22·29	+4·284	4	−42 25 29·0	+1·87	6	1527 θ
472	Pavonis	4	18 23 8·30	+7·052	11	−71 33 25·3	+2·02	7	1525 ζ
473	Pavonis	5	18 28 44·81	+5·913	6	−65 1 0·4	+2·51	5	1533
474	2 Aquilæ	5	18 32 58·01	+3·282	2	− 9 12 28·0	+2·87	6	
475	27 Sagittarii φ	4·5	18 35 2·11	+3·745	5	−27 9 24·3	+3·05	7	
476	Pavonis	5	18 36 26·74	+5·589	7	−62 22 8·2	+3·18	6	1541 λ
477	32 Sagittarii ν¹	5	18 43 54·29	+3·623	5	−22 56 42·5	+3·82	5	
478	34 Sagittarii σ	3	18 44 43·35	+3·722	6	−26 29 56·4	+3·89	9	
479	35 Sagittarii ν²	5	18 44 50·44	+3·621	5	−22 52 29·5	+3·90	6	
480	37 Sagittarii ξ²	5	18 47 35·13	+3·578	5	−21 19 18·3	+4·13	8	
481	38 Sagittarii ζ	3·4	18 51 47·55	+3·823	11	−30 6 50·2	+4·49	13	
482	39 Sagittarii ο	4·5	18 54 29·60	+3·592	3	−21 58 56·0	+4·72	5	
483	Cor. Aust.	5	18 54 55·20	+4·057	3	−37 17 53·6	+4·76	6	1573 γ
484	40 Sagittarii τ	4	18 56 19·34	+3·755	3	−27 54 36·3	+4·88	6	
485	Cor. Aust.	5	18 56 30·38	+4·184	3	−40 45 1·2	+4·89	5	1574 δ
486	16 Aquilæ λ	3	18 57 13·67	+3·184	3	− 5 7 49·3	+4·95	8	
487	Cor. Aust.	4·5	18 57 53·93	+4·084	3	−38 9 34·8	+5·01	6	1577 α
488	Cor. Aust.	5	18 58 19·76	+4·137	4	−39 36 2·6	+5·05	5	1579 β
489	41 Sagittarii π	4·5	18 59 38·99	+3·571	5	−21 17 7·2	+5·16	6	
490	20 Aquilæ	5	19 3 27·40	+3·254	5	− 8 12 58·3	+5·48	7	

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	″	″	″	″	″
456	....	....	....	+ 0·01	− 0·41	....	....	....	+ 2·6	+ 1·2
457	....	....	+ 0·01	− 0·09	+ 0·23	....	....	....	+ 0·9	+ 2·2
458	....	....	....	− 0·17	− 0·37	....	....	+ 2·6	+ 3·8	+ 0·2
459	....	....	....	....	− 0·07	....	....	....	....	+ 1·9
460	....	....	+ 0·24	+ 0·18	− 0·24	....	....	− 0·7	+ 3·1	+ 2·9
461*	+ 0·86	....	....	....	+ 0·34	+14·6	....	+ 3·0	−19·6	+11·0
462	....	....	+ 0·08	+ 0·04	− 0·26	....	....	− 3·4	− 0·5	− 0·4
463	....	....	....	− 0·02	− 0·30	....	....	+ 4·1	+ 1·7	+ 5·3
464	....	....	− 0·09	+ 0·09	− 0·04	....	....	− 0·1	− 1·4	+12·9
465	− 0·04	+ 0·18	....	....	+ 0·01	+ 7·0	0·0	− 5·2	....	+ 6·7
466	....	....	....	....	+ 0·43	....	....	....	....	+10·5
467	....	....	− 0·03	− 0·07	− 0·13	....	....	− 2·4	+ 5·1	+ 0·8
468	....	....	....	....	+ 0·86*f*	....	....	....	....	+ 1·2*f*
469	....	....	....	....	+ 0·42*f*	....	....	....	....	− 1·5*f*
470	....	....	− 0·20	− 0·05	....	....	....	− 0·7	+ 5·0	+ 1·5
471	....	....	....	....	− 0·11*f*	....	....	....	....	+ 5·8*f*
472	+ 0·28	....	....	....	+ 1·40	+14·4	....	....	....	+ 6·1
473	....	....	....	....	+ 0·75	....	....	− 2·7	....	−24·4
474	....	....	+ 0·03	− 0·13	− 0·16	....	....	+ 2·1	+ 4·1	+ 7·2
475	....	....	+ 0·01	− 0·01	+ 0·29	....	....	+ 0·8	+ 4·5	+ 3·4
476	....	....	....	....	+ 1·54	....	....	....	....	+ 6·0
477	....	....	+ 0·04	− 0·05	− 0·27	....	....	+ 1·2	+ 2·5	+ 1·9
478	....	....	− 0·05	− 0·02	− 0·06	....	....	+ 2·2	+ 4·4	+ 1·5
479	....	....	− 0·11	− 0·14	+ 0·01	....	....	....	+ 2·5	+ 4·6
480	....	....	....	− 0·05	− 0·19	....	....	....	+ 3·9	+ 3·8
481	....	....	+ 0·01	+ 0·24	− 0·18	....	....	− 3·3	+ 3·6	+ 0·6
482	....	....	− 0·34	+ 0·04	− 0·34	....	....	....	+ 3·9	+ 7·1
483	....	....	....	....	− 0·39	....	....	....	....	+14·0
484	....	....	....	+ 0·06	− 0·32	....	....	+ 2·1	+ 2·2	+ 2·7
485	....	....	....	....	− 0·12	....	....	....	....	+ 5·3
486	....	....	....	− 0·02	− 0·55	....	....	− 3·4	+ 1·2	+ 7·0
487	....	....	....	....	− 0·44	....	....	+ 3·4	....	+ 6·7
488	....	....	....	....	− 0·37	....	....	....	....	+ 4·1
489	....	....	....	+ 0·12	− 0·06	....	....	+ 1·0	+ 0·1	+ 2·9
490	....	....	+ 0·18	+ 0·10	− 0·38	....	....	+ 2·4	+ 1·5	+ 4·4

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
			h m s	s		° ′ ″	″		
491	43 Sagittarii *d*	5	19 7 41·09	+ 3·514	6	−19 14 50·4	+ 5·83	7	
492	Sagittarii β^1	3·4	19 10 24·09	+ 4·332	3	−44 46 6·4	+ 6·06	6	1587
493	44 Sagittarii ρ^1	5	19 11 48·58	+ 3·485	2	−18 9 35·1	+ 6·18	8	
494	Sagittarii	4·5	19 12 5·65	+ 4·170	3	−40 55 36·3	+ 6·20	5	1590 α
495	37 Aquilæ *k*	5	19 25 45·05	+ 3·308	7	−10 55 29·1	+ 7·33	6	
496	Octantis	7	19 26 16·40	+167·64	11	−89 34 0·8	+ 7·35	34	
497	52 Sagittarii h^2	4·5	19 26 21·41	+ 3·654	3	−25 15 2·6	+ 7·37	8	
498	39 Aquilæ κ	4	19 27 44·66	+ 3·229	4	− 7 23 55·0	+ 7·49	8	
499	41 Aquilæ ι	5	19 27 55·61	+ 3·104	5	− 1 39 25·5	+ 7·50	6	
500	55 Sagittarii ϵ^2	5	19 32 47·48	+ 3·432	6	−16 30 54·4	+ 7·90	6	
501	Pavonis ι	4	19 40 46·78	+ 7·109	2	−73 20 40·6	+ 8·53	4	1615
502	Sagittarii	4·5	19 43 —	+ 4·162	–	−42 18 22·6	+ 8·75	4	1624 E
503	59 Sagittarii *b*	5	19 46 30·42	+ 3·693	4	−27 36 45·7	+ 8·98	7	
504*	Pavonis δ	4	19 51 58·36	+ 5·794	6	−66 36 13·4	+ 9·41	5	1635
505	62 Sagittarii *c*	4·5	19 52 11·59	+ 3·700	7	−28 10 28·6	+ 9·42	9	
506	Sagittarii	5	19 53 32·11	+ 3·817	4	−32 31 32·8	+ 9·53	5	1643 L^1
507	65 Aquilæ θ	3·4	20 2 31·93	+ 3·095	11	− 1 19 11·5	+10·21	15	
508	5 Capricorni α^1	4	20 8 13·29	+ 3·330	5	−13 1 38·7	+10·64	6	
509	6 Capricorni α^2	3	20 8 37·06	+ 3·331	29	−13 3 55·8	+10·67	17	
510	8 Capricorni ν	5	20 11 13·84	+ 3·333	7	−13 17 18·5	+10·86	5	
511	9 Capricorni β	3·4	20 11 27·27	+ 3·375	5	−15 18 43·1	+10·88	8	
512	Pavonis α	2	20 12 8·86	+ 4·812	7	−57 16 15·2	+10·93	5	1657
513	10 Capricorni π	5	20 17 34·99	+ 3·443	7	−18 45 45·7	+11·32	6	
514	11 Capricorni ρ	5	20 19 9·39	+ 3·432	7	−18 22 10·5	+11·44	7	
515	69 Aquilæ	5	20 20 45·79	+ 3·134	4	− 3 26 44·6	+11·55	6	
516	Indi α	3	20 25 34·60	+ 4·258	10	−47 52 36·0	+11·89	5	1676
517	Pavonis	5	20 26 14·56	+ 5·639	10	−67 20 58·0	+11·94	5	1674 υ
518	Pavonis β	3	20 29 31·98	+ 5·547	11	−66 48 14·8	+12·17	5	1677
519	71 Aquilæ	5	20 29 33·36	+ 3·099	8	− 1 41 36·8	+12·17	9	
520	15 Capricorni υ	5	20 30 21·89	+ 3·427	5	−18 43 52·4	+12·23	5	
521	16 Capricor. ψ	4·5	20 36 1·04	+ 3·572	5	−25 52 33·0	+12·62	5	
522	2 Aquarii ι	4·5	20 38 28·21	+ 3·252	3	−10 6 47·3	+12·78	3	
523	3 Aquarii	4	20 38 45·84	+ 3·170	4	− 5 38 42·1	+12·80	5	
524	Microscop.	5	20 39 19·96	+ 3·771	4	−34 24 6·8	+12·84	5	1689 α
525	Indi β	4	20 41 27·49	+ 4·770	6	−59 5 15·6	+12·98	6	1691

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C—J	Rumker. R—J	Taylor. T—J	Pond. P—J	Ast. Soc. A.S.—J	La Caille. C—J	Rumker. R—J	Taylor. T—J	Pond. P—J	Ast. Soc. A.S.—J
	s	s	s	s	s	"	"	"	"	"
491	....	....	+ 0·13	+ 0·11	— 0·24	....	....	+ 0·8	+ 2·7	+ 2·6
492	— 0·36	....	....	....	— 0·07	+ 9·6	....	— 2·0	....	+ 5·5
493	....	....	....	+ 0·09	+ 0·14	....	....	....	+ 5·4	+ 4·5
494	— 0·64	....	....	....	— 0·29	+12·4	....	....	....	+ 9·4
495	....	....	+ 0·23	+ 0·07	— 0·22	....	....	....	+ 3·0	+ 5·9
496	....	....	....	....	....	....	....	....	....	....
497	....	....	....	+ 0·04	— 0·36	....	....	....	+ 2·5	+ 4·4
498	....	....	....	— 0·05	— 0·13	....	....	+ 2·2	+ 1·3	+ 5·1
499	....	....	— 0·19	+ 0·03	— 0·09	....	....	+ 2·7	+ 2·8	+ 7·0
500	....	....	....	+ 0·05	— 0·28	....	....	....	+ 3·2	+ 7·4
501	— 1·35	....	....	....	— 1·40	+ 8·3	....	....	....	+14·4
502	....	....	....	....	....	....	....	....	....	+ 2·2
503	....	....	....	— 0·03	— 0·18	....	....	+ 2·6	+ 2·7	+ 6·3
504*	—16·28	....	....	....	— 1·26	+92·4	....	....	....	+29·5
505	....	....	....	+ 0·12	— 0·17	....	....	+ 1·9	+ 1·1	+ 5·9
506	....	....	+ 0·25	— 0·04	— 0·90	....	....	+ 0·9	— 1·0	+ 3·5
507	....	....	+ 0·02	0·00	— 0·14	....	....	+ 1·8	+ 4·9	+ 5·2
508	....	....	— 0·01	— 0·10	— 0·27	....	....	+ 4·6	+ 3·3	+ 7·3
509	....	....	0·00	— 0·04	— 0·08	....	....	+ 6·8	+ 3·3	+ 6·4
510	....	....	....	— 0·05	— 0·11	....	....	....	+ 5·3	+ 6·9
511	....	....	....	— 0·02	— 0·23	....	....	+ 2·9	+ 3·4	+ 8·0
512	— 0·79	— 0·24	....	....	+ 0·06	+ 4·7	+ 4·6	+ 3·4	....	+ 6·5
513	....	....	....	0·00	— 0·08	....	....	+ 3·8	+ 3·2	+ 6·2
514	....	....	— 0·02	0·00	— 0·49	....	....	+ 5·2	+ 4·1	+ 6·2
515	....	....	— 0·01	+ 0·06	— 0·37	....	....	+ 6·6	+ 3·8	+ 8·8
516	— 0·92	....	....	....	+ 0·26	— 3·8	....	....	....	+ 3·2
517	....	....	....	....	— 0·86	....	....	....	....	+ 2·4
518	— 0·13	+ 0·20	....	....	+ 0·38	+ 2·3	+ 0·2	+ 4·7	....	— 1·4
519	....	....	+ 0·03	+ 0·11	— 0·26	....	....	....	+ 2·8	+ 7·6
520	....	....	....	+ 0·07	— 0·37	....	....	....	+ 2·7	+ 8·7
521	....	....	+ 0·15	+ 0·16	+ 0·40	....	....	....	+ 3·6	+ 5·9
522	....	....	+ 0·15	— 0·04	— 0·20	....	....	— 0·9	+ 4·9	+10·9
523	....	....	— 0·14	+ 0·05	— 0·48	....	....	+ 0·5	+ 2·9	+ 7·4
524	....	....	....	— 0·13	— 0·87	....	....	....	— 5·9	+ 3·2
525	— 0·26	....	....	....	+ 0·17	— 0·4	....	+ 5·9	....	+14·3

N°	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	N° of Obs.	Mean Declination, 1830.	Annual Variation.	N° of Obs.	La Caille's N° and Letter.
526	6 Aquarii μ	4·5	$20^{h}\ 43^{m}\ 28^{s}$·77	+ 3^{s}·239	5	− $9^{\circ}\ 36'\ 56''$·7	+$13''$·11	11	
527	22 Capricor. η	5	20 54 43·27	+ 3·430	10	−20 31 17·9	+13·84	9	
528	13 Aquarii ν	5	21 0 19·62	+ 3·270	5	−12 3 18·6	+14·19	9	
529	29 Capricor.	5	21 6 19·79	+ 3·329	8	−15 52 22·9	+14·56	12	
530	4 Pisc. Aust.	5	21 7 36·71	+ 3·658	5	−32 52 38·5	+14·63	5	
531*	Pavonis γ	3	21 12 16·48	+ 5·086	6	−66 7 38·4	+14·91	7	1724
532	32 Capricor. ι	5	21 13 46·49	+ 3·350	4	−17 33 13·1	+14·94	12	
533	Indi	5	21 14 4·50	+ 4·352	3	−55 23 18·1	+15·02	5	1731 γ
534	34 Capricor. ζ	4	21 16 57·05	+ 3·441	6	−23 8 32·5	+15·18	11	
535	22 Aquarii β	3	21 22 36·34	+ 3·162	35	− 6 18 53·7	+15·50	36	
536	39 Capricor. ε	5	21 27 33·17	+ 3·372	5	−20 13 22·3	+15·77	7	
537	23 Aquarii ξ	5	21 28 41·78	+ 3·192	6	− 8 36 45·8	+15·83	5	
538	40 Capricor. γ	4	21 30 39·90	+ 3·322	7	−17 25 33·6	+15·94	7	
539	41 Capricor.	5	21 22 19·10	+ 3·426	5	−24 1 38·4	+16·02	7	
540	43 Capricor. κ	5	21 33 9·37	+ 3·353	6	−19 38 11·9	+16·07	6	
541	9 Pisc. Aust. ι	4·5	21 34 48·06	+ 3·597	5	−33 47 49·2	+16·15	7	
542	49 Capricor. δ	3·4	21 37 39·02	+ 3·304	13	−16 53 39·3	+16·30	17	
543	10 Pisc. Aust. θ	5	21 37 44·52	+ 3·547	5	−31 40 49·2	+16·30	5	
544	Gruis γ	3	21 43 36·60	+ 3·657	7	−38 9 37·0	+16·60	8	1762
545	51 Capricor. μ	5	21 44 1·30	+ 3·259	9	−14 20 53·7	+16·62	9	
546	Indi	5	21 46 17·44	+ 4·152	5	−55 47 43·9	+16·73	6	1764 δ
547	31 Aquarii ο	5	21 54 31·19	+ 3·104	6	− 2 58 23·3	+17·11	5	
548	Gruis	5	21 55 50·51	+ 3·654	3	−40 21 37·0	+17·17	5	1780 λ
549	Octantis	6	21 56 10·00	+15·436	14	−86 49 8·8	+17·19	19	
550	34 Aquarii α	3	21 57 3·08	+ 3·082	26	− 1 8 32·8	+17·23	31	
551	33 Aquarii ι	4·5	21 57 —	+ 3·247	..	−14 41 32·0	+17·24	4	
552	Gruis α	2	21 57 28·76	+ 3·818	4	−47 46 48·9	+17·25	5	1781
553	Gruis	5	22 5 —	+ 3·649	..	−42 11 1·8	+17·59	5	
554	Gruis	5	22 5 20·59	+ 3·649	3	−42 11 20·0	+17·62	7	1787 μ^{1}
555	Toucan α	3	22 6 46·78	+ 4·216	6	−61 6 10·5	+17·65	7	1789
556	43 Aquarii θ	4·5	22 7 51·54	+ 3·163	13	− 8 37 37·5	+17·69	16	
557	47 Aquarii	5	22 12 13·55	+ 3·318	5	−22 26 49·6	+17·87	8	
558	48 Aquarii γ	4	22 12 52·56	+ 3·092	11	− 2 14 27·9	+17·89	6	
559	Toucan	5	22 15 8·37	+ 4·384	12	−65 49 38·8	+17·98	5	1799 δ
560	Gruis	4·5	22 19 4·64	+ 3·625	9	−44 21 39·8	+18·13	5	1804 δ^{1}

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	"	"	"	"	"
526	....	....	+ 0·22	+ 0·05	− 0·18	....	....	− 1·4	+ 2·2	+ 8·6
527	....	....	− 0·03	− 0·02	− 0·06	....	....	+ 0·9	+ 3·1	+ 5·1
528	....	....	....	+ 0·13	− 0·52	....	....	+ 1·8	+ 2·5	+ 7·2
529	....	....	....	+ 0·16	+ 0·23	....	....	....	+ 3·0	+ 8·2
530	....	....	+ 0·25	+ 0·24	− 0·60	....	....	+ 3·8	− 0·7	+10·4
531*	− 1·21	....	....	....	+ 0·12	−60·6	....	+ 3·1	....	− 2·3
532	....	....	− 0·03	− 0·19	− 0·06	....	....	....	+ 3·5	+ 8·6
533	....	....	+ 0·11	....	+ 0·36	....	....	− 0·7	....	+14·0
534	....	....	− 0·05	− 0·15	− 0·53	....	....	+ 3·1	+ 1·3	+ 5·5
535	....	....	+ 0·16	− 0·06	− 0·19	....	....	+ 2·0	+ 2·8	+ 7·6
536	....	....	0·00	− 0·05	− 0·13	....	....	− 5·3	+ 2·4	+ 3·4
537	....	....	0·00	0·00	+ 0·05	....	....	+ 9·1	+ 4·0	+ 7·7
538	....	....	+ 0·18	− 0·02	− 0·28	....	....	+ 3·7	+ 4·8	+ 5·9
539	....	....	+ 0·14	+ 0·04	+ 0·25	....	....	+ 1·7	+ 3·5	+ 5·9
540	....	....	− 0·11	+ 0·06	− 0·41	....	....	− 0·1	+ 3·2	+ 5·2
541	....	....	+ 0·13	+ 0·09	− 0·35	....	....	+ 2·8	+ 1·2	+ 5·8
542	....	....	+ 0·08	− 0·02	− 0·21	....	....	− 1·3	+ 1·8	+ 5·2
543	....	....	− 0·02	− 0·09	+ 0·10	....	....	....	− 0·1	+ 6·0
544	− 0·81	− 0·50	+ 0·14	....	− 0·66	+ 7·1	+ 5·7	+ 2·7	....	+ 6·4
545	....	....	− 0·09	0·00	− 0·56	....	....	+ 1·8	+ 4·5	+ 7·9
546	....	....	+ 0·41	....	− 0·68	....	....	+ 1·3	....	+13·2
547	....	....	+ 0·02	− 0·07	− 0·46	....	....	+ 5·6	+ 3·7	+ 6·2
548	....	....	....	....	− 0·45*f*	....	....	....	....	+ 5·0*f*
549	....	....	....	....	....	....	....	....	....	....
550	....	....	− 0·04	+ 0·01	− 0·20	....	....	+ 2·2	+ 2·3	+ 3·1
551	....	....	....	....	....	....	....	....	+ 7·6	+16·0
552	− 1·26	− 0·38	+ 0·16	....	+ 0·26	+17·2	+ 3·6	+ 5·0	....	+ 9·3
553	....	....	....	....	....	....	....	....	....	....
554	....	....	+ 0·17	....	− 0·82	....	....	− 0·5	....	+ 3·8
555	+ 0·35	− 0·01	....	....	+ 0·74	+ 0·7	+ 4·0	+ 3·7	....	+12·3
556	....	....	+ 0·09	− 0·05	− 0·26	....	....	+ 3·4	+ 3·3	+ 5·2
557	....	....	....	+ 0·14	− 0·54	....	....	+ 3·9	+ 3·9	+ 6·6
558	....	....	....	− 0·13	− 0·24	....	....	− 0·8	+ 1·8	+ 7·2
559	....	....	....	....	− 0·63	....	....	− 9·2	....	+ 6·6
560	....	....	− 0·07	....	− 0·25	....	....	+ 2·7	....	+ 2·8

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
561	Gruis	5	22h 19m 34s·05	+ 3s·628	5	−44° 36′ 57″·8	+18″·15	7	1805 δ
562	55 Aquarii ζ	4	22 20 4·71	+ 3·077	14	− 0 53 15·5	+18·17	15	
563	57 Aquarii σ	5	22 21 38·80	+ 3·182	6	−11 32 43·6	+18·23	7	
564	17 Pis. Aust. β	4	22 21 49·30	+ 3·432	7	−33 12 53·6	+18·23	7	
565	59 Aquarii υ	5	22 25 23·13	+ 3·280	10	−21 34 34·0	+18·35	5	
566	62 Aquarii η	4	22 26 37·17	+ 3·077	6	− 0 59 29·9	+18·40	8	
567	Octantis	5	22 28 5·82	+ 6·904	11	−82 16 3·1	+18·45	7	1811 β
568	18 Pis. Aust. ε	4	22 31 14·35	+ 3·336	15	−27 55 38·5	+18·56	9	
569	Gruis β	3	22 32 28·67	+ 3·618	6	−47 46 14·0	+18·60	6	1823
570	Gruis	5	22 35 8·74	+ 3·743	7	−54 23 28·7	+18·68	8	1827 η
571	Gruis ε	4	22 38 14·54	+ 3·670	12	−52 12 31·5	+18·78	6	1835
572	22 Pis. Aust. γ	5	22 43 3·32	+ 3·363	6	−33 46 28·4	+18·92	9	
573	73 Aquarii λ	4	22 43 44·50	+ 3·133	9	− 8 28 57·2	+18·94	6	
574	76 Aquarii δ	3	22 45 37·27	+ 3·106	12	−16 43 23·0	+19·00	6	
575	24 Pis. Aust. α	1	22 48 14·55	+ 3·311	65	−30 31 15·8	+19·07	58	
576	Gruis	5	22 50 47·72	+ 3·609	4	−53 39 51·7	+19·14	9	1847 ζ
577	Gruis	5	22 57 16·35	+ 3·423	6	−44 26 11·3	+19·30	5	1857 θ
578	Octantis	6	22 57 40·30	+16·000	13	−88 24 38·2	+19·31	27	1828 χ
579	88 Aquarii c^2	4·5	23 0 22·28	+ 3·208	5	−22 5 36·8	+19·37	4	
580	Gruis	5	23 0 42·29	+ 3·425	4	−46 9 56·0	+19·37	7	1865 ι
581	89 Aquarii c^3	5	23 0 49·47	+ 3·216	5	−23 22 37·7	+19·38	4	
582	90 Aquarii φ	5	23 5 31·00	+ 3·106	20	− 6 57 51·5	+19·48	8	
583	Toucan γ	4	23 7 27·17	+ 3·577	7	−59 9 57·3	+19·52	6	1877
584	93 Aquarii ψ^2	5	23 9 3·95	+ 3·121	18	−10 6 36·7	+19·55	6	
585	App. Sculp.	5	23 9 37·63	+ 3·260	6	−33 27 27·6	+19·56	6	1879 γ
586	95 Aquarii ψ^3	5	23 10 7·03	+ 3·122	5	−10 32 22·7	+19·57	9	
587	98 Aquarii b^1	5	23 14 1·96	+ 3·170	16	−21 1 37·9	+19·64	11	
588	99 Aquarii b^2	5	23 17 6·56	+ 3·166	14	−21 34 21·4	+19·69	9	
589	App. Sculp.	5	23 23 50·10	+ 3·237	7	−38 45 25·8	+19·80	7	1898 β
590	101 Aquarii b^4	5	23 24 22·30	+ 3·151	18	−21 51 10·9	+19·80	13	
591	Phœnicis	5	23 25 54·33	+ 3·257	5	−43 33 15·8	+19·82	5	1901 ι
592*	Phœnicis	6·7	23 30 18·48	+ 3·257	5	−47 34 48·8	+19·88	5	1906 θ
593	102 Aquarii ω^1	5	23 30 57·63	+ 3·114	8	−15 9 41·7	+19·88	5	
594	103 Aquarii A^1	5	23 32 45·03	+ 3·123	11	−18 57 58·4	+19·90	6	
595	104 Aquarii A^2	5	23 32 55·82	+ 3·122	7	−18 45 32·8	+19·90	8	

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J	La Caille. C−J	Rumker. R−J	Taylor. T−J	Pond. P−J	Ast. Soc. A.S.−J
	s	s	s	s	s	"	"	"	"	"
561	....	....	....	....	− 0·35	....	....	− 0·7	....	+ 6·8
562	....	....	− 0·06	− 0·01	− 0·33	....	....	+ 1·4	+ 5·5	+ 4·3
563	....	....	....	− 0·03	− 0·06	....	....	+ 3·4	+ 3·6	+11·9
564	....	....	+ 0·05	+ 0·12	+ 0·08	....	....	+ 2·3	+ 0·7	+ 3·0
565	....	....	− 0·09	− 0·10	− 0·18	....	....	+ 2·1	+ 3·7	+ 5·0
566	....	....	+ 0·13	+ 0·11	− 0·18	....	....	+ 0·7	+ 3·3	+ 9·1
567	+ 5·85	− 0·19	....	....	+ 0·24	+ 0·7	− 2·2	....	....	+35·7
568	....	....	− 0·01	+ 0·10	− 0·14	....	....	+ 4·5	+ 4·2	+ 4·4
569	− 1·65	− 0·25	− 0·03	....	− 0·05	+ 4·1	+ 0·1	+ 2·3	....	+ 8·5
570	....	....	....	....	− 0·44	....	....	....	....	+ 2·8
571	....	....	+ 0·15	....	− 0·86	....	....	+ 1·6	....	+ 2·1
572	....	....	+ 0·18	+ 0·31	+ 0·07	....	....	+ 3·5	− 4·9	+ 7·3
573	....	....	+ 0·11	+ 0·06	− 0·37	....	....	+ 5·7	+ 3·7	+ 4·8
574	....	....	+ 0·06	+ 0·03	− 0·13	....	....	+ 1·8	+ 3·4	+ 7·6
575	....	....	− 0·17	− 0·22	− 0·21	....	....	− 0·5	+ 1·3	+ 1·9
576	....	....	+ 0·40	....	− 0·16	....	....	+ 7·9	....	+ 6·5
577	....	....	+ 0·28	....	+ 0·18	....	....	+ 1·9	....	+ 4·2
578	....	....	....	....	....	....	....	....	....	....
579	....	....	+ 0·22	+ 0·06	+ 0·08	....	....	+ 2·2	+ 3·0	+ 7·8
580	....	....	+ 0·11	....	+ 3·51	....	....	+ 2·1	....	+ 0·2
581	....	....	....	+ 0·10	− 0·07	....	....	+ 2·1	+ 3·1	+ 4·9
582	....	....	− 0·02	+ 0·11	− 0·27	....	....	+ 1·7	+ 2·3	+ 4·1
583	+ 0·89	− 0·13	+ 0·18	....	− 0·69	+ 3·0	+ 1·1	0·0	....	+ 5·6
584	....	....	....	+ 0·21	+ 0·16	....	....	+ 0·6	+ 4·4	+ 9·1
585	....	....	+ 0·23	+ 0·24	+ 0·03	....	....	+ 5·8	+ 0·9	+ 5·2
586	....	....	− 0·08	+ 0·13	− 0·34	....	....	....	+ 3·9	+ 9·4
587	....	....	+ 0·15	+ 0·20	− 0·44	....	....	− 0·6	+ 2·2	+ 0·7
588	....	....	− 0·10	− 0·06	− 0·69	....	....	+ 1·5	+ 3·2	− 0·5
589	....	....	....	....	− 0·26*f*	....	....	....	....	− 6·5*f*
590	....	....	+0·12	+ 0·06	+ 0·01	....	....	+ 0·2	+ 1·7	+ 3·1
591	....	− 0·14	− 0·15	....	+ 0·04	....	....	+ 5·6	....	+ 8·2
592*	....	....	+ 0·19	....	− 0·42	....	....	+ 1·9	....	+ 1·0
593	....	....	+ 0·22	+ 0·26	− 0·13	....	....	− 3·1	+ 3·8	+ 7·5
594	....	....	....	+ 0·24	− 0·28	....	....	+ 2·1	+ 3·7	+ 7·5
595	....	....	....	+ 0·30	− 0·23	....	....	....	+ 4·2	+ 6·4

Nº	Stars.	Magnitudes.	Mean Right Ascension, 1830.	Annual Variation.	Nº of Obs.	Mean Declination, 1830.	Annual Variation.	Nº of Obs.	La Caille's Nº and Letter.
596	106 Aquarii i^1	5	$23^{h}\ 35^{m}\ 22^{s}{\cdot}65$	$+3^{s}{\cdot}118$	12	$-19^{\circ}\ 13'\ 11''{\cdot}3$	$+19''{\cdot}93$	7	
597	App. Sculp.	5	23 40 3·62	+3·133	9	−29 4 13·0	+19·97	11	1915 ϑ
598	Octantis	5	23 41 49·99	+3·927	10	−82 57 48·0	+19·98	8	1917 γ^1
599	Octantis	5	23 47 57·50	+3·656	6	−83 6 54·2	+20·02	6	1921 γ^2
600*	Toucan	5	23 48 35·80	+3·213	4	−65 14 30·6	+20·02	6	1923 η
601	27 Piscium	5	23 49 58·30	+3·073	13	− 4 29 57·2	+20·02	11	
602*	Toucan	5	23 51 1·19	+3·190	6	−66 31 23·4	+20·03	6	1926 ι
603	29 Piscium	5	23 53 6·77	+3·071	7	− 3 58 27·1	+20·03	8	
604	30 Piscium	4·5	23 53 14·60	+3·073	3	− 6 57 32·9	+20·03	5	
605	2 Ceti	4	23 55 1·53	+3·078	5	−18 16 58·4	+20·04	7	
606	33 Piscium	5	23 56 38·01	+3·070	4	− 6 39 32·5	+20·04	5	

N°	Differences, in Right Ascension, from					Differences, in Declination, from				
	La Caille. C−*J*	Rumker. R−*J*	Taylor. T−*J*	Pond. P−*J*	Ast. Soc. A.S.−*J*	La Caille. C−*J*	Rumker. R−*J*	Taylor. T−*J*	Pond. P−*J*	Ast. Soc. A.S.−*J*
596	....	....	$+ 0^{s}{\cdot}18$	$+ 0^{s}{\cdot}12$	$- 0^{s}{\cdot}12$	....	....	$- 0''{\cdot}2$	$+ 3''{\cdot}0$	$+ 4''{\cdot}6$
597	....	....	+ 0·13	+ 0·10	− 0·33	....	....	+ 3·7	+10·0	+ 4·9
598	+10·51	− 0·58	....	....	− 1·73	+ 0·3	− 2·6	....	....	+ 4·9
599	....	− 0·61	....	....	− 3·02	....	− 3·3	....	....	+ 9·7
600*	....	....	+ 0·53	....	− 0·58	....	....	....	....	−29·3
601	....	....	− 0·04	− 0·04	− 0·74	....	....	+ 0·3	+ 1·4	+ 4·8
602*	....	− 0·77	− 0·69	....	− 0·49	....	+ 4·0	....	....	+11·6
603	....	....	+ 0·07	+ 0·14	− 0·80	....	....	+ 3·6	+ 3·2	+ 6·3
604	....	....	− 0·01	− 0·01	− 0·48	....	....	+ 1·4	+ 1·4	+ 4·0
605	....	....	+ 0·09	+ 0·08	+ 0·03	....	....	+ 2·7	+ 4·8	+ 8·3
606	....	....	+ 0·05	+ 0·18	− 0·26	....	....	+ 4·1	+ 2·0	+ 2·4

NOTES.

REMARK.—The Right Ascensions and Declinations given in the following Notes are reduced (unless otherwise expressed), by the Annual Variations inserted in the Catalogue, to the beginning of the year in which the observations were made. The fractions of the year indicate the mean date of observation.

No. 4. *Toucan*. The place of this star depends on the following observations:—

1831·94 .... 7 obs. .... R.A. = $0^h\ 11^m\ 12^s{\cdot}70$

1831·92 .... 2 obs. .... Dec. = $-65^\circ\ 52'\ 3''{\cdot}3$
1832·79 ..: 5 obs. .... = $51\ 44\ {\cdot}6$

The comparison with La Caille gives an annual proper motion in

R.A. = $+0^s{\cdot}256$
Dec. = $+1''{\cdot}165$;

which, if taken into account, makes the mean places, 1st January, 1830, as follow:

R.A. = $0^h\ 11^m\ 9^s{\cdot}28$
Dec. = $-65^\circ\ 52'\ 27''{\cdot}2$

Is there a mistake of 2′ in declination in Mr. Fallows' Catalogue?

No. 6. *β Hydri*. The observations from which this place is derived are—

1831·84 .... 6 obs. .... R.A. = $0^h\ 16^m\ 45^s{\cdot}41$
1832·84 ....12 obs. .... = $48\ {\cdot}21$

1831·83 .... 6 obs. .... Dec. = $-78^\circ\ 12'\ 24''{\cdot}2$
1832·87 .... 5 obs. .... = $4\ {\cdot}7$

The differences from La Caille indicate an annual proper motion in

R.A. = $+0^s{\cdot}697$
Dec. = $+0''{\cdot}280$

Making allowance for this, we have, for the 1st January, 1830,

R.A. = $0^h\ 16^m\ 41^s{\cdot}17$
Dec. = $-78^\circ\ 12'\ 45''{\cdot}1$

No. 8. α *Phœnicis.* 1830·86 .... 3 obs. .... R.A. = $0^h\ 17^m\ 51^s{\cdot}79$
1831·89 .... 2 obs. .... = 54 ·92
1832·83 .... 2 obs. .... = 57 ·72

1830·84 .... 5 obs. .... Dec. = −43° 13′ 48″·0
1831·86 .... 2 obs. .... = 28 ·6
1832·92 .... 3 obs. .... = 10 ·4

The difference from La Caille gives an annual proper motion in

R.A. = $+0^s{\cdot}016$
Dec. = −0″·445

Taking account of this, we have, 1st January 1830,

R.A. = $0^h\ 17^m\ 51^s{\cdot}80$
Dec. = −43° 13′ 48″·0

No. 16. *Phœnicis.* 1831·89 .... 2 obs. .... R.A. = $0^h\ 35^m\ 43^s{\cdot}92$
1832·83 .... 5 obs. .... = 46 ·55

1831·92 .... 2 obs. .... Dec. = −58° 23′ 24″·9
1832·82 .... 5 obs. .... = 7 ·1

The difference from La Caille gives an annual proper motion in

R.A. = $-0^s{\cdot}013$
Dec. = −0″·513

Introducing the proper motion, the declination becomes

−58° 23′ 44″·8

No. 25. γ *Phœnicis.* 1830·82 .... 8 obs. .... R.A. = $1^h\ 20^m\ 58^s{\cdot}57$
1831·89 .... 9 obs. .... = 61 ·11

1830·82 .... 4 obs. .... Dec. = −44° 11′ 30″·0
1831·85 .... 8 obs. .... = 11 ·8

The difference from La Caille gives a proper motion in declination

= −0″·257,

which makes the declination = −44° 11′ 30″·0.

No. 26. δ *Phœnicis.* 1830·93 .... 7 obs. .... R.A. = $1^h\ 24^m\ 9^s{\cdot}99$
1831·90 ....10 obs. .... = 12 ·48
1832·59 .... 6 obs. .... = 14 ·85

The comparison with La Caille indicates a proper motion in

R.A. = $+0^s{\cdot}015$

No. 33. *Eridani.* 1830·87 .... 3 obs. .... R.A. = $1^{h}\ 49^{m}\ 20^{s}{\cdot}37$
1831·87 .... 5 obs. .... = 22·62

1831·92 .... 2 obs. .... Dec. = $-52^{\circ}\ 27'\ 10''{\cdot}4$
1832·74 .... 6 obs. .... = 26 52·2

The difference from La Caille gives a proper motion in

R.A. = $+0^{s}{\cdot}0595$
Dec. = $+0''{\cdot}306$

Taking account of this, we have, 1st January 1830,

R.A. = $1^{h}\ 49^{m}\ 20^{s}{\cdot}27$
Dec. = $-52^{\circ}\ 27'\ 28''{\cdot}7$

No. 36. *α Hydri.* 1831·88 .... 2 obs. .... R.A. = $1^{h}\ 53^{m}\ 27^{s}{\cdot}00$
1832·93 .... 5 obs. .... 28·69

The difference from La Caille gives a proper motion in

R.A. = $+0^{s}{\cdot}036$

This will make the R.A., 1st January 1830,

= $1^{h}\ 53^{m}\ 24^{s}{\cdot}94$

No. 74. *β Reticuli.* 1831·92 .... 5 obs. .... R.A. = $3^{h}\ 42^{m}\ 6^{s}{\cdot}78$
1832·51 .... 9 obs. .... = 7·18

The difference from La Caille gives a proper motion in

R.A. = $+0^{s}{\cdot}0296$

This would make the R.A., 1st January 1830,

= $3^{h}\ 42^{m}\ 5^{s}{\cdot}87$

No. 124. *ι Columbæ.* In Mr. Pond's Catalogue of 1112 Stars, the R.A. of this star is $5^{h}\ 26^{m}\ 11^{s}{\cdot}83$: in his Catalogue of 720 Stars, the R.A. is $5^{h}\ 25^{m}\ 10^{s}{\cdot}76$. The difference (P—J) here given is on the supposition that there is an error of 1^{s} in the R.A. of the 1112 Catalogue.

No. 140. *β Columbæ.* 1831·05 .... 1 obs. .... Dec. = $-35^{\circ}\ 50'\ 11''{\cdot}1$
1832·11 .... 7 obs. .... = 8·9

The difference from La Caille gives a proper motion in

Dec. = $+0''{\cdot}401$

This will make the Declination, 1st January 1830,

= $-35^{\circ}\ 50'\ 12''{\cdot}5$

No. 152. α *Argûs.* As the R.A. of this star, according to other authorities, differs considerably from mine, I subjoin the results of the observations of four different years, reduced to 1st January 1830.

1830 .... 2 obs. .... R.A. = $6^{h}\ 20^{m}\ 11^{s}.08$
1831 .... 31 obs. .... = 10·93
1832 .... 39 obs. .... = 10·87
1833 .... 23 obs. .... = 10·91

No. 153. *Canis Majoris.* This star is No. 810 Ast. Soc. Cat. (D^{1} *Can. Maj.*), and is marked in that work as 521 of La Caille's Catalogue, and, I believe, correctly, for the right ascension corresponds; but there is an error of 10′ in the declination of La Caille's Catalogue.

No. 161. α *Equulei Pictorii.*

1832·08 .... 8 obs. .... R.A. = $6^{h}\ 46^{m}\ 27^{s}{\cdot}86$
1833·07 .... 22 obs. .... = 28·55

1832·09 .... 7 obs. .... Dec. = $-61^{\circ}\ 45'\ 42''{\cdot}3$
1833·20 .... 4 obs. .... = 46·4

The difference from La Caille gives a proper motion in

R.A. = $-0^{s}{\cdot}020$
Dec. = $+0''{\cdot}295$

Taking this into account, we have, 1st January 1830,

R.A. = $6^{h}\ 46^{m}\ 26^{s}{\cdot}70$
Dec. = $61^{\circ}\ 45'\ 35''{\cdot}0$

No. 214. *Argûs.* My right ascension of this star differs considerably from Mr. T. Taylor's. The following are the results of three years' observation, reduced to the beginning of 1830 :—

1831 .... 16 obs. .... R.A. = $9^{h}\ 1^{m}\ 44^{s}{\cdot}92$
1832 .... 5 obs. .... = 45·00
1833 .... 10 obs. .... = 44·78

No. 215. *Argûs.* 1832·25 .... 5 obs. .... R.A. = $9^{h}\ 4^{m}\ 39^{s}{\cdot}64$
1832·17 .... 5 obs. .... Dec. = $71^{\circ}\ 55'\ 36''{\cdot}9$

The difference from La Caille indicates proper motion in

R.A. = $-0^{s}{\cdot}021$
Dec. = $-0''{\cdot}530$

If we allow for this, we have, 1st January 1830,

R.A. = $9^{h}\ 4^{m}\ 39^{s}{\cdot}22$
Dec. = $-71^{\circ}\ 55'\ 6''{\cdot}4$

No. 218. *β Argûs.* 1831·18 .... 9 obs. .... R.A. = $9^{h}\ 11^{m}\ 19^{s}\cdot 13$
1832·17 .... 7 obs. .... = 19 67
1833·14 .... 14 obs. .... = 20 ·33

The difference from La Caille gives a proper motion in

R.A. = $-0^{s}\cdot 032$

This will make the R.A., 1st January 1830,

= $9^{h}\ 11^{m}\ 18^{s}\cdot 31$

No. 224. *Argûs.* This is one of the stars my R.A. of which differs considerably from Mr. T. Taylor's. The results of two years' observation, reduced to the beginning of 1830, are as follow:

1831 .... 4 obs. .... R.A. = $9^{h}\ 24^{m}\ 0^{s}\cdot 73$
1832 .... 5 obs. .... = 0 ·64

No. 246. *Argûs.* Another star in which I differ considerably in R.A. from Mr. T. Taylor and the Ast. Soc. Cat. My R.A. depends on four observations made in 1832.

No. 251. *Chamæleontis.* 1832·28 .... 3 obs. .... R.A. = $10^{h}\ 44^{m}\ 7^{s}\cdot 74$.

The differences between the R.A. of this star in the Catalogue, and that according to other authorities, are very wide. The comparison with La Caille's seems to indicate a proper motion in R.A. = $-0^{s}\cdot 046$. La Caille's places, so near the pole, are, perhaps, not to be depended upon for any great degree of accuracy; but, admitting this amount of proper motion as an element of reduction, my R.A. would be *increased* by $0^{s}\cdot 105$, and Mr. Rumker's *diminished* by about $0^{s}\cdot 138$; the difference from him would, therefore, be reduced to $+0^{s}\cdot 35$, which amount, perhaps, is not considerable in this part of the heavens.

No. 268. *Chamæleontis.* 1832·33. 9 obs. R.A. = $11^{h}\ 51^{m}\ 24^{s}\cdot 16$.

The comparison with La Caille gives a proper motion in

R.A. = $-0^{s}\cdot 039$,

which would increase the R.A. in the Catalogue $0^{s}\cdot 09$.

No. 276. *Chamæleontis.* 1832·32. 7 obs. R.A. = $12^{h}\ 8^{m}\ 40^{s}\cdot 30$.

The difference from La Caille indicates a proper motion in

R.A. = $-0^{s}\cdot 039$,

which would increase the R.A. in this Catalogue $0^{s}\cdot 09$, and diminish that of Mr. Rumker's by about $0^{s}\cdot 12$; and thus our difference would be reduced to $+0^{s}\cdot 19$.

No. 277. ι *Crucis.* 1831·34 .... 16 obs. .... R.A. = $12^{h}\ 12^{m}\ 17^{s}{\cdot}78$
1832·36 .... 5 obs. .... = $20{\cdot}91$

The difference from La Caille's gives a proper motion in

$$\text{R.A.} = -0^{s}{\cdot}025$$

No. 278. *Crucis.* This is the star (α¹ *Crucis* of Mr. Fallows) which La Caille has omitted in his Catalogue, though, Mr. Baily states, he observed it as a star of the 7th magnitude. Mr. Fallows calls it a 4·5 magnitude; and Mr. Dunlop considered it a 6th or 6·7th. This difference of estimation caused me to observe its magnitude very carefully in the beginning of 1833; and it certainly appeared to me *not under* the 5th.

No. 279. α¹ *Crucis.* 1831·28 .... 17 obs. .... R.A. = $12^{h}\ 17^{m}\ 15^{s}{\cdot}87$
1832·30 .... 10 obs. .... = $19{\cdot}27$

The difference from La Caille indicates a proper motion in

$$\text{R.A.} = -0^{s}{\cdot}020;$$

but it is a double star, and the R.A. of the preceding one is here given; and if La Caille observed the centre of the two stars, which is most probable, for he does not appear to have noticed that it was double, great part of the difference is accounted for. The circle telescope did not very distinctly separate the two stars; the declination, therefore, given in the Catalogue, is probably that of the centre of the mass. This, however, will occasion but little error, as both stars are nearly in the same parallel.

No. 301. *Centauri.* 1831·36 .... 5 obs. .... R.A. = $13^{h}\ 11^{m}\ 7^{s}{\cdot}59$
1832·29 .... 5 obs. .... = $10{\cdot}86$

From the comparison with La Caille, this star appears to have a proper motion in

$$\text{R.A.} = -0^{s}{\cdot}023$$

No. 317. *Centauri.* 1832·39 .... 5 obs. .... R.A. = $13^{h}\ 56^{m}\ 49^{s}{\cdot}51$
1831·45 .... 4 obs. .... Dec. = $-35^{\circ}\ 32'\ 5''{\cdot}4$
1832·39 .... 5 obs. .... = $21{\cdot}4$

The comparison with La Caille gives a proper motion in

$$\text{R.A.} = -0^{s}{\cdot}043$$
$$\text{Dec.} = -0''{\cdot}558$$

The amount of the former is very nearly identical with that Mr. Baily has used in the Astronomical Society's Catalogue, and which has also been used in our reductions. Taking account of the proper motion in declination, we have, for mean declination of this star, 1st January 1830,

$$= -35^{\circ}\ 31'\ 46''{\cdot}0$$

No. 335. α^1 *Centauri.* 1831·40 .... 4 obs. .... R.A. = $14^h\ 28^m\ 10^s{\cdot}31$
1832·44 .... 3 obs. .... = 14 ·18

1831·40 .... 3 obs. .... Dec. = 60° 8′ 5″·3
1832·53 .... 4 obs. .... = 21 ·6

The comparison with La Caille gives a proper motion in

R.A. = $-0^s{\cdot}463$
Dec. = +0 ·797

Taking account of this, we have, for 1st January, 1830,

R.A. = $14^h\ 28^m\ 6^s{\cdot}44$
Dec. = −60° 7′ 51″·1

The difference of $+0^s{\cdot}19$ between the R.A. above given and that in the Catalogue proceeds from my having omitted to notice, in the latter, the proper motion due to the fractional part of the year in which the observations were made; and the mistake was not discovered until after the sheet containing it had been printed.

This remark applies also to α^2 *Centauri.*

No. 336. α^2 *Centauri.* 1831·38 .... 9 obs. .... R.A. = $14^h\ 28^m\ 11^s{\cdot}84$
1831·49 .... 12 obs. .... = 15.73

1831·39 .... 10 obs. .... Dec. = −60° 7′ 49″·1
1832·52 .... 3 obs. .... = 8 5 ·4

The comparison with La Caille gives n proper motion in

R.A. = $-0^s{\cdot}464$
Dec. = +0″·798

Taking acconnt of this, we have, 1st January, 1830,

R.A. = $14^h\ 28^m\ 7^s{\cdot}98$
Dec. = −60° 7′ 34″·7

The difference between the above R.A. and that in the Catalogue arises from the cause mentioned in the last note.

In the "*Catalogus Stellarum Australium*" of Halley are the following distances of this star, observed by him, at St. Helena, in 1677:—

From Spica Virginis = 51° 41′ 20″
Antares = 38 55 20

These I have redneed, using the mean places of *Spica* and *Antares* given in this Catalogue, which were first taken back to 1750 by the precession due to the middle period 1790; and then to 1677, by the precession answering to 1713·5.

I find the R.A. of α^2 *Centauri* in 1677 = $14^h\ 18^m\ 7^s{\cdot}27$
Dec. = −59° 26′ 23″

Reducing all the determinations to 1750, we have

Halley, 1677	R.A. $=14^h\ 23^m\ 26^s{\cdot}9$	Dec. $= -59^\circ\ 46'\ 17''$
La Caille, 1750	$=14\ \ 22\ \ 49\ {\cdot}9$	$=\ \ 59\ \ 47\ \ \ 7\ {\cdot}5$
Johnson, 1830	$=14\ \ 22\ \ 12\ {\cdot}8$	$=\ \ 59\ \ 46\ \ \ 2\ {\cdot}0$

Thus, Halley's observations confirm the proper motion in R.A. as indicated by the comparison of La Caille's result with mine, both in direction and nearly in amount; for, from 1677 to 1750, it appears to have been $-0^s{\cdot}507$ annually; and from 1750 to 1830 (as before mentioned) $-0^s{\cdot}464$. But there is something anomalous in the declinations. Can La Caille have committed a mistake of 1′? It does not appear so from the details given in the "*Fundamenta Astronomiæ;*" and I am not aware of any other means of discovering it. His place of α^1 *Centauri* would have afforded a check had he observed that star independently; but, unfortunately, its place seems to have been deduced from α^2 *Centauri* by a micrometrical measurement.

No. 353. *γ Trianguli Australis.*

1831·43 .... 8 obs. .... R.A. $=15^h\ 3^m\ 15^s{\cdot}95$
1832·49 .... 9 obs. .... $=$ $21\ {\cdot}28$

The difference in R.A. from La Caille gives a proper motion

$$= -0^s{\cdot}016$$

No. 371. *β Trianguli Australis.*

1831·51 .... 2 obs. .... R.A $=15^h\ 40^m\ 20^s{\cdot}17$
1832·51 .... 12 obs. .... $=$ $25\ {\cdot}28$

1832·38 .... 5 obs. .... Dec. $= -62^\circ\ 54'\ 6''{\cdot}4$

The comparison with La Caille gives a proper motion in

$$\text{R.A.} = -0^s{\cdot}023$$
$$\text{Dec.} = -0''{\cdot}405$$

Noticing this, we have, 1st January, 1830,

$$\text{R.A.} = \ 15^h\ 40^m\ 14^s{\cdot}92$$
$$\text{Dec.} = -62^\circ\ 53'\ 42''{\cdot}5$$

No. 424. *Scorpii.*—The differences from other authorities in the place of this star are great. I subjoin the *data* from which my place was deduced:

1831·45 .... 1 obs. .... R.A. $=17^h\ 0^m\ 3^s{\cdot}71$
1832·44 .... 6 obs. .... $=$ $8\ {\cdot}18$

1831·49 .... 4 obs. .... Dec. $= -43^\circ\ 0'\ 23''{\cdot}2$
1832·48 ... 5 obs. .... $=$ $28\ {\cdot}7$

No. 427. *o Ophiuchi.* My R.A. of this star differs considerably from that given by Mr. Pond and Mr. T. Taylor. I subjoin the result of observations reduced to 1st January, 1830:

1831 .... 1 obs. .... R.A. $=17^h\ 7^m\ 53^s{\cdot}38$
1832 .... 4 obs. .... $=\ 53{\cdot}36$

This is a double star. My custom with it, as with other double stars, was to observe the preceding one.

No. 445. *o Serpentis.*—The R.A. of this star in Mr. Pond's Catalogue of 1112 Stars is $17^h\ 31^m\ 52^s{\cdot}79$; in that of 720 Stars is $17^h\ 31^m\ 51^s{\cdot}90$. The difference from Mr. Pond is on the supposition that there is error of 1^s in the Catalogue of 1112 Stars.

No. 461. *β Telescopii.* This star is called *ε Sagittarii* in Mr. Baily's paper on La Caille's Catalogue (*Memoirs Ast. Soc.*, vol. v., p. 118).

No. 504. *δ Pavonis.*

1832·65 .... 6 obs. .... R.A. $=\ 19^h\ 52^m\ 9^s{\cdot}95$
1832·65 .... 5 obs. .... Dec. $=-66^\circ\ 35'\ 54''{\cdot}6$

The difference from La Caille gives a proper motion in

R.A. $=+0^s{\cdot}197$
Dec. $=-1''{\cdot}118$

Taking this into account, we have, 1st January, 1830,

R.A. $=\ 19^h\ 51^m\ 57^s{\cdot}84$
Dec. $=-66^\circ\ 36'\ 10''{\cdot}4$

No. 531. *γ Pavonis.*

1831·73 .... 1 obs. .... R.A. $=21^h\ 12^m\ 21^s{\cdot}73$
1832·73 .... 5 obs. .... $=\ 26{\cdot}62$

1831·75 .... 2 obs. .... Dec. $=-66^\circ\ 7'\ 22''{\cdot}3$
1832·79 .... 5 obs. .... $=\ 9{\cdot}1$

The difference from La Caille indicates a proper motion in

R.A. $=+0^s{\cdot}015$
Dec. $=+0''{\cdot}737$

Taking account of the latter, we have, 1st January, 1830,

Dec. $=-66^\circ\ 7'\ 40''{\cdot}2$

No. 592. *Phœnicis.*—This is a close double star, both about 6·7th magnitude. The R.A. of the preceding is here *attempted* to be given.

No. 600. *Toucan.*—This is one of the stars in which I differ considerably in R.A. from Mr. Taylor. The following are the *data* on which my place depends, reduced to 1st January, 1830:—

1831 .... 1 obs. .... R.A. $=23^{h}\ 48^{m}\ 35^{s}{\cdot}89$
1832 .... 3 obs. .... $=$ $35{\cdot}77$

No. 602. *Toucan.*—This is another star my R.A. of which differs widely from that of Mr. T Taylor and Mr. Rumker. The following are my results, reduced to 1st January, 1830:—

1831 .... 2 obs. .... R.A. $=23^{h}\ 51^{m}\ 1^{s}{\cdot}24$
1832 .... 4 obs. .... $=$ $1{\cdot}17$

THE END.

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ERRATA.

Page 13, lines 4 and 5 from the bottom, *instead of* " The stars used for this purpose were at first confined to those only in Mr. Pond's Catalogue of 720 Stars, exceeding 30° in altitude," *read* " The stars used for this purpose were at first confined to those only in Mr. Pond's Standard Catalogue exceeding 30° in altitude, taking their mean places from his Catalogue of 720 Stars."

—— 14, line 11 from the bottom, *after* the word " not," *insert* " been."

—— 20, last line, *for* " $-0^{s}{\cdot}69$," *read* " $+0^{s}{\cdot}69$."

—— 37, N° 33 (C−J) in Æ, *for* " $+4^{s}{\cdot}84$," *read* " $-4^{s}{\cdot}84$."

—— 44, N° 147, *for* " 5 Monoceris," *read* " 5 Monocerotis."

—— 48, N° 215, *after* " 215," *insert* *.

—— 48, N° 218, *after* " 218," *insert* *.

—— 49, N° 215 (C−J) in Declination, *for* " $-43''{\cdot}5$," *read* " $+43''{\cdot}5$."

—— 55, N° 317 (C−J) in Æ, *for* " $-3^{s}{\cdot}43$," *read* " $+3^{s}{\cdot}43$."

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